

European Commission Decision 1999/217/EC
as regards the register of flavouring substances used in or on
foodstuffs

As amended in 2000, 2002, 2004, 2005, 2006, 2008, 2009 & 2012

& The Final EU Flavourings List of October 2012

(COMMISSION REGULATION (EU) No 872/2012)

with amended Regulations No's 873/2012, 985/2013,
1321/2013 and 246/2014

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II

(Acts whose publication is not obligatory)

COMMISSION

COMMISSION DECISION

of 23 February 1999

adopting a register of flavouring substances used in or on foodstuffs drawn up in application of Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996

(notified under number C(1999) 399)

(text with EEA relevance)

(1999/217/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs ⁽¹⁾ and in particular Article 3(2) thereof;

Whereas, in application of Article 3(1) of Regulation (EC) No 2232/96, Member States, within one year of the entry into force of the abovementioned Regulation, shall notify to the Commission the list of flavouring substances accepted for use in or on foodstuffs marketed on their territory;

Whereas, in application of Article 3(2) of the said Regulation, notified flavouring substances, the legal use of which in one Member State must be recognised by the other Member States, shall be entered in a register adopted in accordance with the procedure laid down in Article 7 of the Regulation;

Whereas it is recognized that in certain Member States, some flavouring substances are presently subject to restrictive or prohibitive measures;

Whereas it is recognised that such restrictive or prohibitive measures in force at the date of adoption of the current Decision may continue to be applied, pending completion of the evaluation of the substance;

⁽¹⁾ OJ L 299, 23.11.1996, p. 1.

Whereas, in any case, where a Member State notes that a flavouring substance contained in the register may constitute a danger to public health, it may invoke the safeguard procedure provided for in Article 3(3) of Regulation (EC) No 2232/96;

Whereas the register forms the basis of the programme for evaluation provided for in Article 4 of the said Regulation which is to be adopted within ten months of the adoption of the register;

Whereas the measures provided for in this Decision are in accordance with the opinion of the Standing Committee for Foodstuffs.

HAS ADOPTED THIS DECISION:

Article 1

The register of flavouring substances annexed to this Decision is hereby adopted.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 23 February 1999.

For the Commission
Martin BANGEMANN
Member of the Commission

Register of flavouring substances notified by the Member States pursuant to Article 3(1) of Regulation EC No 2232/96 of the European Parliament and of the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs

In application of Article 3(1) of Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs⁽¹⁾, the Commission has received from the Member States and from certain EFTA countries party to the EEA Agreement⁽²⁾, lists of flavouring substances which currently are legally accepted on their territory and consequently should benefit from free circulation in application of the Treaty.

On the basis of the foregoing, the Commission, in application of Article 3(2) of the same Regulation, drafted the present Register which is to be adopted within one year after the end of the notification procedure and lists as an Annex the flavouring substances notified.

The main list has been divided into three distinct parts. Indeed, as none of the existing classification systems for chemicals covered the totality of the notified products, this separation was necessary. A fourth part lists those substances for which confidentiality has been requested by a Member State in order to protect the intellectual rights of the manufacturer.

PART 1

This major section classifies the chemical substances following their CAS⁽³⁾ numbers, insofar these had been attributed or made available.

PART 2

Failing the CAS numbers, this second part makes reference to the CoE⁽⁴⁾ coding system.

PART 3

Only in the absence of the foregoing coding systems, a residual and limited set of substances had to be brought under this section. They were originally sorted alphabetically on the basis of their English common name. For the unique purpose of overcoming incoherence after translation they have been attributed a specific ad hoc number.

PART 4

Part 4 lists a limited number of substances notified by one or more Member States in application of Article 3(2) last indent, which specifies that substances shall be designated in such a way as to protect the intellectual rights of their manufacturers. In other words, confidentiality has been requested on these flavourings, which explains why they are referred to under a coded form. A Commission communication⁽⁵⁾ and recommendation⁽⁶⁾ give guidance on the practical modalities for application of this provision. It must be observed that whilst only a limited number of accredited persons have access to the relevant information, the confidentiality of the data expires five years after the date of receipt of the notification. This confidential treatment does not affect in any way the application of legal obligations applicable to the flavouring substances in question. It must be stressed that in particular the obligations to bring on the market only those substances that do not constitute a danger to public health and to conform with the mandatory safety evaluation remain unaltered.

⁽¹⁾ OJ L 299, 23.11.1996, p. 1.

⁽²⁾ Norway and Iceland.

⁽³⁾ Chemical Abstracts Service.

⁽⁴⁾ Council of Europe.

⁽⁵⁾ OJ C 131, 29.4.1998, p. 3.

⁽⁶⁾ OJ L 127, 29.4.1998, p. 32.

In part 1 to 3, EINECS ⁽⁷⁾ and FEMA ⁽⁸⁾ numbers are indicated, where available.

Specific remarks, under a numbered form are listed in the column 'comments'. The explanation hereof is the following:

1. substance which, apart from its flavouring properties, is used for other purposes on or in foodstuffs, and, therefore, may be subject to additional legal provisions;
2. substance the use of which in certain Member States is subject to restrictive or prohibitive measures;
3. substance to be given priority evaluation;
4. substance on which additional information is to be submitted.

The Commission is aware that the need of splitting the reported substances into different parts is the origin of some duplicates and overlaps which subsist in the current list. This is mainly due to the large variety of names currently in use for the same substance. Nevertheless, it is well known that even within a recognised classification system as CAS numbering, inconsistencies exist. Fine-tuning is not only a complex and time consuming exercise, it may also be somewhat premature at this stage. Indeed, it would seem that proper identification, and consequently sound elimination of duplicates, may more adequately be undertaken during the evaluation phase itself (in application of Article 5(1) of Regulation (EC) No 2232/96), as only then all relevant data on a given substance will have been made available. It is also at that time that a more appropriate and unified numbering system for flavourings could be envisaged.

Consequently, it was considered opportune to maintain all possible duplicates in the register, avoiding the risk of deleting substances which in any case should have been kept.

A specific question raised concerned the treatment of salts and other derived compounds from a 'generic' substance. Certain substances had been notified with a high degree of precision. A typical example could be quinine, which is reported as such, but also as its sulphate, bisulphate, chlorhydrate, hydrochloride and monohydrochloride dihydrate, all of them granted specific CAS numbers. Other substances are lacking this detailed identification. Indeed, on a number of acids or bases, no specific guidance is given on the actual covering of their derived salts. It is provisionally presumed, but only for the purpose of this register, that ammonium, sodium, potassium and calcium salts, as well as chlorides, carbonates and sulphates, are covered by the 'generic' substance, providing they have flavouring properties. It is obvious, however, that final acceptance will depend of the results of the evaluation, which in these cases should verify carefully the accuracy of such assimilation.

⁽⁷⁾ European Inventory of Existing Chemical Substances.

⁽⁸⁾ Flavour and Extract Manufacturers' Association.

PART 1

FLAVOURING SUBSTANCES

(ordered by CAS number)

CAS	Name	FEMA	CoE	EINECS	Comments
10-87-5	Ethanethiol		546		
10-95-0	3-Methylbutyl pentanoate				
27-60-7	Ethylmercaptan				
50-21-5	2-Hydroxypropanoic acid	2611	4	200-018-0	(1)
51-67-2	2-(4-Hydroxyphenyl)ethylamine		709	200-115-8	
56-41-7	I-Alanine		11729	200-273-8	(1)
56-84-8	Aspartic acid	3656	10078	200-291-6	(1)
56-85-9	Glutamine	3684		200-292-1	(1)
56-87-1	I-Lysine		11947	200-294-2	(1)
56-89-3	Cystine		11747	200-296-3	(1)
57-06-7	Allyl isothiocyanate	2034	2110	200-309-2	
57-10-3	Hexadecanoic acid	2832	14	200-312-9	(1)
57-11-4	Octadecanoic acid	3035	15	200-313-4	
58-08-2	Caffeine	2224	11741	200-362-1	(3)
59-51-8	d,l-Methionine	3301	569	200-432-1	(1)
60-01-5	Glyceryl tributyrate	2223	747	200-451-5	(1)
60-12-8	2-Phenylethan-1-ol	2858	68	200-456-2	
60-18-4	I-Thyrosine	3736		200-460-4	(1)
60-33-3	Octadeca-9,12-dienoic acid	3380	694	200-470-9	(1)
60-35-5	Acetamide			200-473-5	
61-90-5	I-Leucine	3297	10482	200-522-0	(1)
63-68-3	I-Methionine	3301		200-562-9	(1)
63-91-2	I-Phenylalanine	3585	10488	200-568-1	(1)-(3)
64-04-0	Phenethylamine	3220	708	200-574-4	
64-17-5	Ethanol	2419	11891	200-578-6	(1)
64-18-6	Formic acid	2487	1	200-579-1	(1)
64-19-7	Acetic acid	2006	2	200-580-7	(1)
65-85-0	Benzoic acid	2131	21	200-618-2	(1)
66-25-1	Hexanal	2557	96	200-624-5	
67-03-8	Thiamine hydrochloride	3322	10493	200-641-8	(1)
67-47-0	5-Hydroxymethylfurfuraldehyde		11112	200-654-9	
67-63-0	Isopropanol	2929		200-661-7	(1)
67-64-1	Acetone	3326	737	200-662-2	(1)
67-68-5	Methylsulfinylmethane			200-664-3	
69-72-7	Salicylic acid		10165	200-712-3	
70-54-2	DL-Lysine		11947	200-740-6	(1)
71-00-1	I-Histidine	3694		200-745-3	(1)
71-23-8	Propan-1-ol	2928	50	200-746-9	
71-36-3	Butan-1-ol	2178	52	200-751-6	(4)
71-41-0	Pentan-1-ol	2056	514	200-752-1	
72-18-4	I-Valine	3444		200-773-6	(1)
73-32-5	I-iso-Leucine			200-798-2	(1)
74-79-3	I-Arginine		11890	200-811-1	(1)
74-89-5	Methylamine		10483	200-820-0	
74-93-1	Methanethiol	2716	475	200-822-1	
75-04-7	Ethylamine		10477	200-834-7	

CAS	Synonyms	Systematic name
10-87-5		
10-95-0		
27-60-7		
50-21-5		
51-67-2	Tyramine; 4-(2-aminoethyl)phenol	
56-41-7		2-Aminopropanoic acid
56-84-8		2-Aminobutanedioic acid
56-85-9		
56-87-1		
56-89-3		
57-06-7	3- Isothiocyanatopropene; AITC	
57-10-3	Palmitic acid	
57-11-4	Stearic acid	
58-08-2		1,3,7-trimethyl-2,6-dioxapurine
59-51-8	D,L-Methionine; alpha-Amino-gamma-methyl thio-n-butyric acid; 2-Amino-4-(methyl thio)-butanoic acid	2-Amino-4-(methylthio)butanoic acid
60-01-5	Tributylin; Glycerol tributyrate	
60-12-8	Phenethyl alcohol; Phenethyl alcohol; beta-Phenethyl alcohol	
60-18-4		
60-33-3	Linoleic acid	
60-35-5		
61-90-5		
63-68-3		
63-91-2		
64-04-0		
64-17-5		
64-18-6		Methanoic acid
64-19-7		
65-85-0	Benzenecarboxylicacid; Phenylformic acid	
66-25-1	Aldehyde C-6; Hexaldehyde	
67-03-8	Vitamin B1	3-((4-amino-2-methyl-5-pyrimidinyl)methyl)-5-(2-hydroxyethyl)-4-methylthiazolium chloride
67-47-0	5- Hydroxymethylfurfuraldehyde	
67-63-0	Isopropyl alcohol	
67-64-1	Propan-2-one	
67-68-5		
69-72-7		2-Hydroxybenzoicacid
70-54-2		
71-00-1		
71-23-8		
71-36-3		
71-41-0	Amyl alcohol	
72-18-4		
73-32-5		
74-79-3		
74-89-5		
74-93-1	Methylmercaptan	
75-04-7		

CAS	Name	FEMA	CoE	EINECS	Comments
75-07-0	Acetaldehyde	2003	89	200-836-8	
75-08-1	Ethanthiol		546	200-837-3	
75-18-3	Dimethyl sulfide	2746	483	200-846-2	
75-31-0	Isopropylamine		10480	200-860-9	
75-33-2	Propane-2-thiol		11565	200-861-4	
75-50-3	Trimethylamine	3241	10497	200-875-0	
75-65-0	2-Methylpropan-2-ol		698	200-889-7	
75-66-1	2-Methylpropane-2-thiol		11537	200-890-2	
75-85-4	2-Methylbutan-2-ol		515	200-908-9	
76-09-5	2,3-Dimethylbutane-2,3-diol			200-933-5	
76-22-2	d-Camphor	2230	140	200-945-0	
76-49-3	Bornyl acetate	2159	207	200-964-4	
76-50-6	Bornyl isovalerate	2165	451	200-966-5	
77-42-9	12-beta-Santalen-14-ol	3006	74	201-027-2	(4)
77-53-2	Cedrol		10190	201-035-6	
77-54-3	Cedryl acetate		527	201-036-1	
77-74-7	3-Methylpentan-3-ol		10277	201-053-4	
77-83-8	Ethyl methylphenylglycidate	2444	6002	201-061-8	
77-90-7	Tributyl acetylacrylate	3080		201-067-0	
77-93-0	Triethyl citrate	3083	11762	201-070-7	(1)
78-35-3	Linalyl isobutyrate	2640	298	201-108-2	
78-36-4	Linalyl butyrate	2639	276	201-109-8	
78-37-5	Linalyl cinnamate	2641	329	201-110-3	
78-59-1	3,5,5-Trimethylcyclohex-2-en-1-one	3553	11918	201-126-0	
78-69-3	3,7-Dimethyloctan-3-ol	3060	77	201-133-9	
78-70-6	Linalool	2635	61	201-134-4	
78-79-5	2-Methylbuta-1,3-diene			201-143-3	
78-81-9	Isobutylamine		513	201-145-4	
78-83-1	2-Methylpropan-1-ol	2179	49	201-148-0	
78-84-2	2-Methylpropanal	2220	92	201-149-6	
78-92-2	Butan-2-ol		11735	201-158-5	(1)-(4)
78-93-3	Butan-2-one	2170	753	201-159-0	
78-94-4	But-3-en-2-one		11043	201-160-6	
78-98-8	2-Oxopropanal	2969	105	201-164-8	
79-09-4	Propionic acid	2924	3	201-176-3	(1)
79-20-9	Methyl acetate	2676	213	201-185-2	
79-31-2	2-Methylpropionic acid	2222	6	201-195-7	
79-42-5	2-Mercaptopropionic acid	3180	11790	201-206-5	
79-69-6	4-(2,5,6,6-Tetramethyl-2-cyclohexenyl)-3-buten-2-one	2597	145	201-219-6	
79-70-9	4-(2,5,6,6-Tetramethyl-1-cyclohexenyl)but-3-en-2-one			201-220-1	
79-76-5	gamma-Ionone	3175		201-223-8	
79-78-7	Allyl alpha-ionone	2033	2040	201-225-9	
79-89-0	beta-Isomethylionone		650	201-231-1	
79-92-5	Camphene	2229	2227	201-234-8	

CAS	Synonyms	Systematic name
75-07-0	Ethanal	
75-08-1		
75-18-3	Methyl sulfide	
75-31-0		2- Aminopropane
75-33-2		
75-50-3	N,N-Diemthylmethylamine	
75-65-0	1,1-Dimethylethanol; tertButanol	
75-66-1	tert-Butylmercaptan	
75-85-4		
76-09-5		
76-22-2		dl-Bornan-2-one
76-49-3		1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-yl acetate
76-50-6	Bornyl 3-methylbutyrate	1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-yl 3-methylbutanoate
77-42-9		
77-53-2	Cedarwood oil alcohols	2,6,6,8-Tetramethyl-tricyclo[5.3.1.0(1.5)]undecan-8-ol
77-54-3		2,6,6,8-Tetramethyl-tricyclo[5.3.1.0(1.5)]undecan-8-yl acetate
77-74-7		
77-83-8	Ethyl alpha,beta-epoxy-beta-methylphenylpropionate; Strawberry aldehyde; Aldehyde C-16	Ethyl 2,3-epoxy-3-methyl-3-phenylbutanoate
77-90-7		Tributyl2-acetoxy-1,2,3-propanetricarboxylate
77-93-0		Triethyl 2-hydroxy-1,2,3-propanetricarboxylate
78-35-3	Linalyl 2-methylpropionate	1,5-Dimethyl-1-vinylhex-4-enyl 2-methylpropanoate
78-36-4	Linalyl n-butyrate	1,5-Dimethyl-1-vinylhex-4-enyl butanoate
78-37-5		1,5-Dimethyl-1-vinylhex-4-enyl 3-phenylprop-2-enoate
78-59-1	Isophorone; Isoacetophenone	
78-69-3	Tetrahydrolinalool	
78-70-6	2,6-Dimethyl-octadien-2,7-ol-6	3,7-Dimethylocta-1,6-dien-3-ol
78-79-5		
78-81-9		2-Methylpropylamine
78-83-1	Isobutanol	
78-84-2	Isobutanol; Isobutyraldehyde	
78-92-2		
78-93-3	Ethyl methyl ketone; Methyl ethyl ketone	
78-94-4	Methyl vinyl ketone	
78-98-8	Pyruvaldehyde	
79-09-4		
79-20-9	Methyl ethanoate	
79-31-2	Isobutyric acid	
79-42-5	Thiolactic acid	
79-69-6	alpha-Irone	
79-70-9	beta-Irone	
79-76-5		4-(2,2-Dimethyl-6-methylenecyclohexyl)but-3-en-2-one
79-78-7		1-(2,6,6-Trimethylcyclohex-2-enyl)-1,6-heptadien-3-one
79-89-0	Isomethyl beta-ionone	3-Methyl-4-(2,6,6-trimethylcyclohex-1-enyl)but-3-en-2-one
79-92-5	3,3- Dimethyl-2-methylenenorcamphene; 2,2-Dimethyl-3-methylenenorbornane	

CAS	Name	FEMA	CoE	EINECS	Comments
80-26-2	alpha-Terpinyl acetate	3047	205	201-265-7	
80-27-3	Terpinyl propionate	3053	423	201-266-2	
80-53-5	p-Menthane-1,8-diol		701	201-288-2	
80-56-8	Pin-2(3)-ene	2903	2114	201-291-9	
80-57-9	Pin-2-en-4-one		11186	201-292-4	
80-59-1	2-Methylcrotonic acid	3599	10168	201-295-0	
80-62-6	Methyl methacrylate			201-297-1	
80-68-2	Threonine			201-300-6	(1)
80-71-7	3-Methylcyclopentan-1,2-dione	2700	758	201-303-2	
83-34-1	3-Methylindole	3019	493	201-471-7	
83-67-0	Theobromine	3591		201-494-2	(3)
85-32-5	Guanilic acid		0		
85-91-6	Methyl N-methylantranilate	2718	756	201-642-6	
87-05-8	7-Ethoxy-4-methylcoumarin		11870	201-721-5	
87-19-4	Isobutylsalicylate	2213	434	201-729-9	
87-20-7	Isopentyl salicylate	2084	435	201-730-4	
87-22-9	Phenethyl salicylate	2868	437	201-732-5	
87-25-2	Ethyl anthranilate	2421	251	201-735-1	
87-41-2	Phthalide			201-744-0	
87-44-5	beta-Caryophyllene	2252	2118	201-746-1	
87-91-2	Diethyl tartrate	2378	440	201-783-3	
88-09-5	2-Ethylbutyric acid	2429	2001	201-796-4	
88-14-2	2-Furoic acid		10098	201-803-0	
88-15-3	2-Acetylthiophene		11728	201-804-6	
88-60-8	5-Methyl-2-(tert-butyl)phenol			201-842-3	
88-69-7	2-Isopropylphenol	3461	11234	201-852-8	
88-84-6	1(5),7(11)-Guaidiene			201-860-1	
88-99-3	Phthalic acid			201-873-2	(1)
89-46-3	Menthyl salicylate			201-909-7	
89-47-4	Menthyl valerate		472	201-910-2	
89-74-7	2,4-Dimethylacetophenone	2387	157	201-935-9	
89-78-1	Menthol	2665	63	201-939-0	
89-79-2	Isopulegol	2962	2033	201-940-6	
89-80-5	trans-Menthone	2667	2035	201-941-1	
89-81-6	p-Menth-1-en-3-one	2910	2052	201-942-7	
89-83-8	Thymol	3066	174	201-944-8	
89-86-1	2,4-Dihydroxybenzoic acid	3798		201-946-9	
89-88-3	Vetiverol		10321	201-949-5	
90-00-6	2-Ethylphenol		11232	201-958-4	
90-02-8	Salicylaldehyde	3004	605	201-961-0	
90-05-1	2-Methoxyphenol	2532	173	201-964-7	

CAS	Synonyms	Systematic name
80-26-2		p-Menth-1-en-8-yl acetate
80-27-3	p-Menthanyl propionate (mixed isomers - according to FEMA)	p-Menth-1-en-8-yl propanoate
80-53-5	Terpin hydrate	
80-56-8	alpha-Pinene	2,6,6-Trimethyl-bicyclo[3.1.1]hept-2-ene
80-57-9	Verbenone	4,6,6-Trimethyl-bicyclo[3.1.1]hept-3-en-2-one
80-59-1	Tiglic acid	Methylbut-2(trans)-enoic acid
80-62-6		Methyl 2-methylprop-2-enoate
80-68-2		2-Amino-3-hydroxybutanoic acid
80-71-7	2-Hydroxy-3-methylcyclopent-2-en-1-one; Methylcyclopentenolone; 3-methylcyclopentane-1,2-dione; Cyclotene; Corylone	
83-34-1	Skatole	
83-67-0		3,7-Dihydro-3,7-dimethyl-1H-purine-2,6-dione
85-32-5		
85-91-6	Dimethyl anthranilate	Methyl N-methyl-2-aminobenzoate
87-05-8		
87-19-4		2-Methylpropyl 2-hydroxybenzoate
87-20-7		3-Methylbutyl 2-hydroxybenzoate
87-22-9		2-Phenylethyl 2-hydroxybenzoate
87-25-2		Ethyl 2-aminobenzoate
87-41-2		Benzofuran-2(5H)-one
87-44-5	Caryophyllene	4,11,11-Trimethyl-8-methylene-bicyclo[7.2.0]undec-4(trans)-ene
87-91-2		Diethyl 2,3-dihydroxybutandioate
88-09-5		
88-14-2		2-Furancarboxylic acid
88-15-3		
88-60-8		5-Methyl-2-(1,1-dimethylethyl)phenol
88-69-7	o-Cumenol	
88-84-6	beta-Guaiene; (1S-cis)-1,2,3,4,5,6,7,8-octahydro-7-isopropylidene-1,4-dimethylazulene	2,8-Dimethyl-5-isopropylidene-bicyclo[5.3.0]dec-1(7)-ene
88-99-3		1,2-Benzenedicarboxylic acid
89-46-3	Menthyl 2-hydroxybenzoate	p-Menthane-3-yl 2-hydroxybenzoate
89-47-4	Menthyl pentanoate	p-Menthan-3-yl pentanoate
89-74-7		
89-78-1	2-Isopropyl-5-methylcyclohexanol	cis(1,3)-trans(1,4)-Menthan-3-ol
89-79-2	1-Methyl-4-isopropenylcyclohexan-3-ol	p-Menth-8-en-3-ol
89-80-5		trans-p-Menthan-3-one
89-81-6	Piperitone; alpha-Piperitone; 1-Methyl-4-isopropyl-1-cyclohexen-3-one	
89-83-8		2-Isopropyl-5-methylphenol
89-86-1		
89-88-3	Vetivenol; Vetivol	2-Hydroxymethyl-6-methyl-9-(1-methylene-ethyl)-bicyclo[5.3.0]decane and 2-Hydroxymethylisoprop-5-enyl-tricyclo[6.2.1.0(3.7)]undecane
90-00-6		
90-02-8	Salicylic aldehyde	2-Hydroxybenzaldehyde
90-05-1	Guaiacol	

CAS	Name	FEMA	CoE	EINECS	Comments
90-12-0	1-Methylnaphthalene	3193	11009	201-966-8	
90-49-3	2-Methoxynaphthalene		0	201-998-2	
90-87-9	1,1-Dimethoxy-2-phenylpropane	2888	2017	202-022-8	
91-10-1	2,6-Dimethoxyphenol	3137	2233	202-041-1	
91-16-7	1,2-Dimethoxybenzene	3799	10320	202-045-3	
91-19-0	Quinoxaline		11365	202-047-4	
91-20-3	Naphthalene		11014	202-049-5	
91-22-5	Quinoline	3470	11364	202-051-6	
91-57-6	2-Methylnaphthalene		11010	202-078-3	
91-60-1	Naphthalene-2-thiol	3314	2330	202-082-5	
91-61-2	1,2,3,4-Tetrahydro-6-methylquinoline			202-083-0	
91-62-3	6-Methylquinoline	2744	2339	202-084-6	
91-63-4	2-Methylquinoline		11358	202-085-1	
91-87-2	alpha-Pentylcinnamaldehyde dimethyl acetal	2062	47	202-104-3	
92-48-8	6-Methylcoumarin	2699	579	202-158-8	
92-52-4	Biphenyl	3129	10978	202-163-5	(4)
93-04-9	2-Methoxynaphthalene			202-213-6	
93-08-3	Methyl 2-naphthyl ketone	2723	147	202-216-2	
93-15-2	4-4-Allyl-1,2-dimethoxybenzene	2475	185	202-223-0	(2)-(3)
93-16-3	1,2-Dimethoxy-4-(prop-1-enyl)benzene	2476	186	202-224-6	
93-18-5	1,2-beta-Naphthyl ethyl ether	2768	2058	202-226-7	
93-19-6	2-Isobutylquinoline			202-227-2	
93-28-7	Eugenyl acetate	2469	210	202-235-6	
93-29-8	2-Methoxy-4-(prop-1-enyl)phenyl acetate	2470	220	202-236-1	
93-51-6	2-Methoxy-4-methylphenol	2671	175	202-252-9	
93-53-8	2-Phenylpropanal	2886	126	202-255-5	
93-54-9	1-Phenylpropan-1-ol	2884	82	202-256-0	
93-55-0	1-Phenylpropan-1-one	3469	599	202-257-6	
93-58-3	Methyl benzoate	2683	260	202-259-7	
93-60-7	Methyl nicotinate	3709		202-261-8	
93-89-0	Ethyl benzoate	2422	261	202-284-3	
93-91-4	1-Phenylbutan-1,3-dione		11181	202-286-4	
93-92-5	1-Phenethyl acetate	2684	573	202-288-5	
94-02-0	Ethyl 3-phenyl-3-oxopropionate	2423	627	202-295-3	
94-26-8	Butyl 4-hydroxybenzoate	2203	525	202-318-7	(4)
94-30-4	Ethyl 4-methoxybenzoate	2420	249	202-320-8	
94-46-2	Isopentyl benzoate	2058	562	202-334-4	
94-47-3	Phenethyl benzoate	2860	667	202-336-5	
94-48-4	Geranyl benzoate	2511	639	202-337-0	
94-62-2	Piperine	2909	492	202-348-0	
94-86-0	6-Ethoxyprop-3-enylphenol	2922	170	202-370-0	
95-16-9	Benzothiazole	3256	11594	202-396-2	

CAS	Synonyms	Systematic name
90-12-0		
90-49-3		
90-87-9	Phenylpropanal dimethyl acetal; Hydratropic aldehyde dimethyl acetal; 2- Phenylpropionaldehyde dimethyl acetal	
91-10-1		
91-16-7	Veratrole	
91-19-0	1,4- Benzodiazine	
91-20-3		
91-22-5	1- Benzazine	2,3-Benzopyridine
91-57-6		
91-60-1	beta-Thionaphthol; 2-Mercaptonaphthalene	
91-61-2		
91-62-3	'p-Methylquinoline'; 'p-toluquinoline'	
91-63-4	Quinaldine	
91-87-2		1,1-Dimethoxy-2-pentyl-3-phenylprop-2-ene
92-48-8		6-Methyl-1,2-benzopyrone
92-52-4	Diphenyl	
93-04-9	Yara-yara; beta-Naphthyl methyl ether	
93-08-3	2- Acetonaphthone; 2-acetylnaphthalene; oranger crystals; beta- methyl naphthyl ketone; beta-Acetonaphthone	
93-15-2	Methyleugenol; 4- Allylveratrole; Eugenyl methyl ether; Methyl eugenol	
93-16-3	Methyl isoeugenol; Isoeugenyl methyl ether; 1,2-Dimethoxy-4-propenylbenzene; 4-propenylveratrole	
93-18-5	Nerolin	
93-19-6	alpha- Isobutylquinoline; Isobutyl quinoline	2-(2-Methylpropyl)quinoline
93-28-7	Eugenol acetate; Aceteugenol	4-Allyl-2-methoxyphenyl acetate
93-29-8	Isoeugenyl acetate; Isoeugenol acetate; 2-Methoxy-4-propenyl phenyl acetate; Acetisoeugenol	
93-51-6	4- Methylguaicol	
93-53-8	2- Phenylpropionaldehyde; Hydratropaldehyde	
93-54-9	Phenyl ethyl carbinol	
93-55-0	Propiophenone	
93-58-3		
93-60-7		Methyl 3-pyridinecarboxylate
93-89-0	Ethyl benzenecarboxylate	
93-91-4	Benzoylacetone	
93-92-5	Styrallyl acetate	1-Phenylethyl acetate
94-02-0	Ethyl benzoylacetate	
94-26-8		
94-30-4	Ethyl p-anisate; Ethyl anisate	
94-46-2	Isoamyl benzoate	3-Methylbutyl benzoate
94-47-3		
94-48-4		3,7-Dimethylocta-2(trans),6-dienyl benzoate
94-62-2	1-Piperoylpiperidine	1-(5-(3,4-Methylenedioxyphenyl)-1-oxo-2,4-pentadienyl)piperidine
94-86-0	1-Ethoxy-2-hydroxy-4-propenylbenzene; 5-Propenylguaethol	
95-16-9		

CAS	Name	FEMA	CoE	EINECS	Comments
95-20-5	2-Methylindole			202-398-3	
95-21-6	2-Methyl-4,5-benzo-oxazole			202-399-9	
95-41-0	Isojasmone	3552	167	202-417-5	
95-48-7	2-Methylphenol	3480	618	202-423-8	
95-65-8	3,4-Dimethylphenol	3596	11262	202-439-5	
95-87-4	2,5-Dimethylphenol	3595	537	202-461-5	
95-92-1	Diethyl oxalate			202-464-1	
96-04-8	Heptan-2,3-dione	2543	2044	202-472-5	
96-15-1	2-Methylbutylamine		10484	202-483-5	
96-17-3	2-Methylbutyraldehyde	2691	575	202-485-6	
96-22-0	Pentan-3-one		2350	202-490-3	
96-33-3	Methyl acrylate		10759	202-500-6	
96-41-3	Cyclopentanol		10193	202-504-8	
96-47-9	2-Methyltetrahydrofuran		10964	202-507-4	
96-48-0	Butyro-1,4-lactone	3291	615	202-509-5	
96-54-8	1-Methylpyrrole		2217	202-513-7	
97-42-7	Carvyl acetate	2250	2063	202-580-2	
97-45-0	Carvyl propionate	2251	424	202-583-9	
97-53-0	Eugenol	2467	171	202-589-1	
97-54-1	Isoeugenol	2468	172	202-590-7	
97-61-0	2-Methylvaleric acid	2754	31	202-594-9	
97-62-1	Ethyl isobutyrate	2428	288	202-595-4	
97-63-2	Ethyl methacrylate			202-597-5	
97-64-3	Ethyl lactate	2440	371	202-598-0	
97-85-8	Isobutyl isobutyrate	2189	292	202-612-5	
97-86-9	Isobutyl 2-methylprop-2-enoate			202-613-0	
97-87-0	Butyl isobutyrate	2188	291	202-614-6	
97-89-2	Citronellyl isobutyrate	2313	296	202-616-7	
97-95-0	2-Ethylbutan-1-ol		543	202-621-4	
97-96-1	2-Ethylbutanal	2426	95	202-623-5	
97-99-4	Tetrahydrofurfuryl alcohol	3056	2029	202-625-6	
98-00-0	Furfuryl alcohol	2491	2023	202-626-1	
98-01-1	Furfural		2014	202-627-7	(2)-(3)
98-02-2	2-Furanmethanethiol	2493	2202	202-628-2	
98-03-3	Thiophene-2-carbaldehyde		11874	202-629-8	
98-54-4	4-(1,1-Dimethylethyl)phenol			202-679-0	
98-55-5	alpha-Terpineol	3045	62	202-680-6	
98-83-9	(1-Methylethenyl)benzene			202-792-5	
98-85-1	1-Phenylethan-1-ol	2685	2030	202-707-1	
98-86-2	Acetophenone	2009	138	202-708-7	
98-89-5	Cyclohexanecarboxylic acid	3531	11911	202-711-3	
99-48-9	Carveol	2247	2027	202-757-4	
99-49-0	Carvone	2249	146	202-759-5	
99-72-9	2-(p-Tolyl)propionaldehyde	3078	131	202-782-0	

CAS	Synonyms	Systematic name
95-20-5		
95-21-6		
95-41-0		2-Hexyl-cyclopent-2-en-1-one and 2-Hexylidene cyclopentanone
95-48-7	o-Cresol	
95-65-8	3,4- Xylenol	
95-87-4		
95-92-1		Diethyl ethanedioate
96-04-8	Acetyl valeryl	
96-15-1		
96-17-3	2- Methylbutanal; Methyl ethyl acetaldehyde; alpha-Methyl butyraldehyde	
96-22-0	Dimethyl acetone	
96-33-3		Methyl prop-2-enoate
96-41-3	Cyclopentyl alcohol	
96-47-9		
96-48-0	4- Hydroxybutanoic acid lactone; gamma-Butyrolactone; 1,4-Epoxy butan-1-one; 2-Oxo oxolen; Dihydro-2-(3H) furanone	
96-54-8	N-Methylpyrrole	
97-42-7	Carveyl acetate	p-Mentha-6,8-dien-2-yl acetate
97-45-0		p-Mentha-6,8-dien-2-yl propanoate
97-53-0	4-Allylguaiacol; 2-methoxy-4-prop-2-enylphenol; 1-Hydroxy-2-methoxy-4-allylbenzene	4-Allyl-2-methoxyphenol
97-54-1	4-Propenylguaiacol; 2-methoxy-4-propenylphenol	2-Methoxy-4-(prop-1-enyl)phenol
97-61-0	2- Methylpentanoic acid	
97-62-1	Ethyl isobutanoate	Ethyl-2-methylpropanoate
97-63-2		Ethyl 2-methylprop-2-enoate
97-64-3		Ethyl 2-hydroxypropanoate
97-85-8	Isobutyl 2-methylpropionate	2-Methylpropyl 2-methylpropanoate
97-86-9		2-Methylpropyl 2-methylprop-2-enoate
97-87-0	Butyl-2-methylpropionate; n-Butyl 2-methylpropanoate	
97-89-2	Citronellyl 2-methylpropionate	3,7-Dimethyloct-6-enyl 2-methylpropanoate
97-95-0		
97-96-1	2- Ethylbutyraldehyde	
97-99-4		
98-00-0		
98-01-1		
98-02-2	Furfuryl mercaptan	
98-03-3	2- Formylthiophene	
98-54-4	4- tertButylphenol	
98-55-5	alpha-Terpineol	p-Menth-1-en-8-ol
98-83-9		
98-85-1	alpha-methylbenzyl alcohol; Methyl phenyl carbinol; Methylphenyl carbinol; Styrallyl alcohol	
98-86-2	Methyl phenyl ketone	
98-89-5		
99-48-9		p-Mentha-1,8-dien-2-ol
99-49-0	Carvol	p-Mentha-1,8-dien-2-one
99-72-9		2-(4-Methylphenyl)propanal

CAS	Name	FEMA	CoE	EINECS	Comments
99-75-2	Methyl 4-methylbenzoate			202-784-1	
99-83-2	alpha-Phellandrene	2856	2117	202-792-5	
99-85-4	gamma-Terpinene	3559	11025	202-794-6	
99-86-5	alpha-Terpinene	3558	11023	202-795-1	
99-87-6	1-Isopropyl-4-methylbenzene	2356	620	202-796-7	
99-89-8	4-Isopropylphenol			202-798-8	
99-96-7	4-Hydroxybenzoic acid		693	202-804-9	
100-06-1	4-Methoxyacetophenone	2005	570	202-815-9	
100-09-4	p-Anisic acid		10077	202-818-5	
100-42-5	Vinylbenzene	3233	11022	202-851-5	(2)-(3)
100-47-0	Benzonitrile			202-855-7	(4)
100-51-6	Benzyl alcohol	2137	58	202-859-9	(1)
100-52-7	Benzaldehyde	2127	101	202-860-4	
100-53-8	Phenylmethanethiol	2147	477	202-862-5	
100-66-3	Anisole	2097	2056	202-876-1	
100-68-5	Methyl phenyl sulfide		11533	202-878-2	
100-71-0	2-Ethylpyridine		11767	202-881-9	
100-86-7	2-Methyl-1-phenylpropan-2-ol	2393	84	202-896-0	
101-39-3	alpha-Methylcinnamaldehyde	2697	578	202-938-8	
101-41-7	Methyl phenylacetate	2733	2155	202-940-9	
101-48-4	1,1-Dimethoxy-2-phenylethane	2876	40	202-945-6	
101-81-5	Diphenylmethane		11847	202-978-6	
101-84-8	Diphenyl ether	3667	2201	202-981-2	
101-85-9	alpha-Pentylcinnamyl alcohol	2065	79	202-982-8	
101-86-0	alpha-Hexylcinnamaldehyde	2569	129	202-983-3	
101-94-0	p-Tolyl phenylacetate	3077	236	202-990-1	
101-97-3	Ethyl phenylacetate	2452	2156	202-993-8	
102-04-5	1,3-Diphenylpropan-2-one	2397	11839	203-000-0	
102-13-6	Isobutyl phenylacetate	2210	2160	203-007-9	
102-16-9	Benzyl phenylacetate	2149	232	203-008-4	
102-17-0	Anisyl phenylacetate	3740	233	203-010-5	
102-19-2	3-Methylbutyl phenylacetate	2081	2161	203-012-6	
102-20-5	Phenethyl phenylacetate	2866	234	203-013-1	
102-22-7	Geranyl phenylacetate	2516	231	203-014-7	
102-69-2	Tripropylamine		10495	203-047-7	
102-82-9	Tributylamine			203-058-7	
103-05-9	2-Methyl-4-phenylbutan-2-ol	3629	10281	203-074-4	
103-07-1	1,1-Dimethyl-3-phenylpropyl acetate	2735	219	203-077-0	
103-09-3	2-Ethylhexyl acetate			203-079-1	
103-13-9	1-(4-Methoxyphenyl)-4-methylpent-1-en-3-one	3760	719		
103-25-3	Methyl 3-phenylpropionate	2741	427	203-092-2	
103-26-4	Methyl cinnamate	2698	333	203-093-8	
103-28-6	Benzyl isobutyrate	2141	301	203-095-9	
103-36-6	Ethyl cinnamate	2430	323	203-104-6	
103-37-7	Benzyl butyrate	2140	277	203-105-1	

CAS	Synonyms	Systematic name
99-75-2	Methyl p-toluate	
99-83-2	Phellandrene; 2-Methyl-5-isopropyl-1,3-cyclohexadiene; 4-isopropyl-1-methyl-1,5-cyclohexadiene	p-Mentha-1,5-diene
99-85-4		p-Mentha-1,4-diene
99-86-5		p-Mentha-1,3-diene
99-87-6	p-Cymene; Cymene; p-methyl-isopropylbenzene; 4-isopropyl-1-methylbenzene	
99-89-8		
99-96-7		
100-06-1	Acetanisole; p-acetylanisole	
100-09-4		4-Methoxybenzoic acid
100-42-5	Styrene; Phenylethylene	
100-47-0		
100-51-6	Phenyl carbinol	
100-52-7	Benzoic aldehyde	
100-53-8	Benzyl mercaptan	
100-66-3		Methoxybenzene
100-68-5	Thioanisole	
100-71-0		
100-86-7		
101-39-3	2-Methylcinnamaldehyde; alpha-methylcinnamic aldehyde; alpha-Methylcinnamal	2-Methyl-3-phenylprop-2-enal
101-41-7	Methyl alpha-toluate	
101-48-4	alpha-Tolyl aldehyde dimethyl acetal; Phenylacetaldehyde dimethyl acetal	
101-81-5	Benzylbenzene	
101-84-8	Diphenyl oxide; Phenyl ether	
101-85-9		2-Pentyl-3-phenylprop-2-enol
101-86-0		2-Benzylideneoctanal
101-94-0	p-Cresyl phenylacetate	4-Methylphenyl phenylacetate
101-97-3	Ethyl alpha-toluate	
102-04-5	Dibenzyl ketone	
102-13-6	Isobutylalpha-toluate	2-Methylpropyl phenylacetate
102-16-9	Benzyl alpha-toluate	
102-17-0	4-Methoxybenzyl phenylacetate	
102-19-2	Isoamyl phenylacetate; Isopentyl phenylacetate	
102-20-5	Phenylethyl phenylacetate; Phenethyl alpha-toluate	
102-22-7		3,7-Dimethylocta-2(trans),6-dienyl phenyl acetate
102-69-2		
102-82-9		
103-05-9	Phenylethyl dimethyl carbinol	
103-07-1	Dimethyl phenethyl carbonyl acetate	
103-09-3	beta-Ethylhexyl acetate; 2-ethylhexanyl acetate	
103-13-9	Methoxystyryl isopropyl ketone	
103-25-3		
103-26-4		Methyl 3-phenylprop-2-enoate
103-28-6		Benzyl-2-methylpropanoate
103-36-6	Ethyl beta-phenylacrylate; Ethyl trans-cinnamate	Ethyl 3-phenylprop-2-enoate
103-37-7	Benzyl n-butyrate; Benzyl n-butoate	

CAS	Name	FEMA	CoE	EINECS	Comments
103-38-8	Benzyl isovalerate	2152	453	203-106-7	
103-41-3	Benzyl cinnamate	2142	331	203-109-3	
103-45-7	Phenethyl acetate	2857	221	203-113-5	
103-48-0	Phenethyl isobutyrate	2862	302	203-116-1	
103-50-4	Dibenzyl ether	2371	11856	203-118-2	
103-52-6	Phenethyl butyrate	2861	506	203-119-8	
103-53-7	Phenethyl cinnamate	2863	336	203-120-3	
103-54-8	Cinnamyl acetate	2293	208	203-121-9	
103-56-0	Cinnamyl propionate	2301	414	203-124-5	
103-58-2	3-Phenylpropyl isobutyrate	2893	303	203-125-0	
103-59-3	Cinnamyl isobutyrate	2297	496	203-126-6	
103-60-6	2-Phenoxyethyl isobutyrate	2873	2089	203-127-1	
103-61-7	Cinnamyl butyrate	2296	279	203-128-7	
103-79-7	1-Phenylpropan-2-one		11042	203-144-4	
103-82-2	Phenylacetic acid	2878	672	203-148-6	
103-93-5	p-Tolyl isobutyrate	3075	304	203-159-6	
103-95-7	3-(p-Cumenyl)-2-methylpropionaldehyde	2743	133	203-161-7	
104-09-6	p-Tolylacetaldehyde	3071	130	203-173-2	
104-20-1	4-(4-Methoxyphenyl)butan-2-one	2672	163	203-184-2	
104-21-2	p-Anisyl acetate	2098	209	203-185-8	
104-27-8	1-(4-Methoxyphenyl)pent-1-en-3-one	2673	164	203-190-5	
104-45-0	1-Methoxy-4-propylbenzene	2930	11835	203-203-4	
104-46-1	1-Methoxy-4-(1-propenyl)benzene	2086	183	203-205-5	
104-50-7	Octano-1,4-lactone	2796	2274	203-208-1	
104-53-0	3-Phenylpropanal	2887	2013	203-211-8	
104-54-1	Cinnamyl alcohol	2294	65	203-212-3	
104-55-2	Cinnamaldehyde	2286	102	203-213-9	
104-57-4	Benzyl formate	2145	344	203-214-4	
104-61-0	Nonano-1,4-lactone	2781	178	203-219-1	
104-62-1	Phenethyl formate	2864	350	203-220-7	
104-64-3	3-Phenylpropyl formate	2895	351	203-222-8	
104-65-4	Cinnamyl formate	2299	352	203-223-3	
104-67-6	Undecano-1,4-lactone	3091	179	203-225-4	
104-76-7	2-Ethylhexan-1-ol	3151	11763	203-234-3	
104-87-0	p-Tolualdehyde	3068	115	203-246-9	
104-90-5	5-Ethyl-2-methylpyridine	3546	11385	203-250-0	
104-93-8	1-Methoxy-4-methylbenzene	2681	188	203-253-7	
105-01-1	Isobutyl 3-(2-furyl)propionate	2198	2093	203-261-0	
105-13-5	p-Anisyl alcohol	2099	66	203-273-6	
105-21-5	Heptano-1,4-lactone	2539	2253	203-279-9	
105-30-6	2-Methylpentan-1-ol		10273	203-285-1	
105-37-3	Ethyl propionate	2456	402	203-291-4	
105-43-1	3-Methylvaleric acid	3437	10149	203-297-7	
105-45-3	Methyl acetoacetate			203-299-8	

CAS	Synonyms	Systematic name
103-38-8		Benzyl3-methyl butanoate
103-41-3	Benzyl beta-phenylacrylate; Cinnamein	Benzyl 3-phenylprop-2-enoate
103-45-7		
103-48-0	2-Phenethylisobutyrate	2-Phenylethyl 2-methylpropanoate
103-50-4	Benzyl ether; Benzyl oxide	
103-52-6	beta-Phenethyln-butanoate	
103-53-7	Benzyl carbonyl cinnamate	Phenethyl 3-phenylprop-2-enoate
103-54-8		3-Phenylprop-2-enyl acetate
103-56-0		3-Phenylprop-2-enyl propanoate
103-58-2	Hydrocinnamyl isobutyrate	3- Phenylpropyl 2-methylpropanoate
103-59-3	Cinnamyl-2-methylpropionate	3-Phenylprop-2-enyl 2-methylpropanoate
103-60-6		2-Phenylethyl 2-methylpropanoate
103-61-7	Phenylpropenyl-n-butyrate	3-Phenylprop-2-enyl butanoate
103-79-7	Benzyl methyl ketone	
103-82-2	alpha-Toluic acid	
103-93-5	p-Cresyl isobutyrate	4-Methylphenyl 2-methylpropanoate
103-95-7	Cyclamen aldehyde; p-Isopropyl-alpha-methylhydrocinnamaldehyde	2-Methyl-3-(4-isopropylphenyl)propanal
104-09-6		4-Methylphenylacetaldehyde
104-20-1	Anisyl acetone; p-methoxyphenylbutanone; raspberry ketone	
104-21-2		4-Methoxybenzyl acetate
104-27-8	alpha-Methylanisalacetone; Ethone	
104-45-0	p-Propylanisole; Dihydroanethole; p-n-Propyl anisole	
104-46-1		
104-50-7	gamma-Octalactone; Octanolide-1,4; gamma-n-butyl-gamma-butyrolactone	
104-53-0	3- Phenylpropionaldehyde; Hydrocinnamaldehyde; Phenylpropyl aldehyde	
104-54-1	Cinnamic alcohol	3-Phenylprop-2-enol
104-55-2	Cinnamic aldehyde	3-Phenylprop-2-enal
104-57-4	Formic acid benzyl ester	
104-61-0	gamma-Nonalactone; 4-Hydroxynonanoic acid gamma-lactone; Aldehyde C-18 (so-called); prunolide	
104-62-1	Phenethyl formate	
104-64-3	Phenylpropyl formate; Hydrocinnamyl formate	
104-65-4		3-Phenylprop-2-enyl formate
104-67-6	gamma-Undecalactone; Aldehyde C-14 (so-called); Peach aldehyde	
104-76-7	2-Ethylhexyl alcohol	
104-87-0		4-Methylbenzaldehyde
104-90-5	5- Ethyl-2-picoline	
104-93-8	p-Methylanisole	
105-01-1	Isobutyl furylpropionate; Isobutyl 2-furanpropionate	2-Methylpropyl 3-(2-furyl)propanoate
105-13-5	Anisic alcohol	4-Methoxybenzyl alcohol
105-21-5	gamma-Heptalactone; Heptanolide-1,4	
105-30-6		
105-37-3	Ethyl propanoate	
105-43-1		
105-45-3	Methyl acetyl acetate	Methyl 3-oxobutanoate

CAS	Name	FEMA	CoE	EINECS	Comments
105-46-4	sec-Butyl acetate		10527	203-300-1	
105-53-3	Diethyl malonate	2375	2106	203-305-9	
105-54-4	Ethyl butyrate	2427	264	203-306-4	
105-57-7	1,1-Diethoxyethane	2002	35	203-310-6	
105-58-8	Diethyl carbonate		710	203-311-1	
105-60-2	1,6-Hexalactam			203-313-2	
105-66-8	Propyl butyrate	2934	266	203-320-0	
105-67-9	2,4-Dimethylphenol		11259	203-321-6	
105-68-0	3-Methylbutyl propionate	2082	417	203-322-1	
105-79-3	Isobutyl hexanoate	2202	314	203-332-6	
105-82-8	1,1-Dipropoxyethane		2342	203-335-2	
105-85-1	Citronellyl formate	2314	345	203-338-9	
105-86-2	Geranyl formate	2514	343	203-339-4	
105-87-3	Geranyl acetate	2509	201	203-341-5	
105-89-5	Rhodinyl propionate	2986	422	203-343-6	
105-90-8	Geranyl propionate	2517	409	203-344-1	
105-91-9	Neryl propionate	2777	509	203-345-7	
105-95-3	Ethyl brassylate	3543	10571	203-347-8	
106-02-5	Pentadecano-1,15-lactone	2840	181	203-354-6	
106-18-3	Butyl dodecanoate	2206	376	203-370-3	
106-21-8	3,7-Dimethyloctan-1-ol	2391	75	203-374-5	
106-22-9	Citronellol	2309	59	203-375-0	
106-23-0	Citronellal	2307	110	203-376-6	
106-24-1	Geraniol	2507	60	203-377-1	
106-25-2	Nerol	2770	2018	203-378-7	
106-26-3	Neral	2303	109	203-379-2	
106-27-4	3-Methylbutyl butyrate	2060	282	203-380-8	
106-29-6	Geranyl butyrate	2512	274	203-381-3	
106-30-9	Ethyl heptanoate	2437	365	203-382-9	
106-32-1	Ethyl octanoate	2449	392	203-385-5	
106-33-2	Ethyl dodecanoate	2441	375	203-386-0	
106-35-4	Heptan-3-one	2545	137	203-388-1	
106-36-5	Propyl propionate	2958	403	203-389-7	
106-44-5	4-Methylphenol	2337	619	203-398-6	
106-65-0	Dimethyl succinate	2396	439	203-419-9	
106-68-3	Octan-3-one	2803	2042	203-423-0	
106-70-7	Methyl hexanoate	2708	319	203-425-1	
106-72-9	2,6-Dimethylhept-5-enal	2389	2006	203-427-2	
106-73-0	Methyl heptanoate	2705	368	203-428-8	
107-02-8	Prop-2-enal			203-453-4	
107-03-9	1-Propane-1-thiol	3521	11816	203-455-5	
107-10-8	Propylamine		601	203-462-3	
107-18-6	Prop-2-en-1-ol		2136	203-470-7	
107-22-2	Ethanedial			203-474-9	

CAS	Synonyms	Systematic name
105-46-4	But-2-yl acetate	1-Methylpropyl acetate
105-53-3	Ethyl malonate; Malonic ester	Diethyl propandioate
105-54-4	Ethyl n-butanoate; Butyric ether	
105-57-7	Diethyl acetal, Acetaldehyde diethyl acetal	
105-58-8		
105-60-2		
105-66-8		
105-67-9	2,4- Xylenol	
105-68-0	Isoamyl propionate; Isopentyl propionate	
105-79-3	Isobutyl caproate	2-Methylpropyl hexanoate
105-82-8	n-Propyl acetal; Dipropyl acetal; Acetaldehyde dipropyl acetal	
105-85-1		3,7-Dimethyloct-6-enyl formate
105-86-2		3,7-Dimethylocta-2(trans),6-dienyl formate
105-87-3	Geraniol acetate	3,7-Dimethylocta-2(trans),6-dienyl acetate
105-89-5	alpha-Citronellyl propionate	3,7-Dimethyloct-7-enyl propanoate
105-90-8		3,7-Dimethylocta-2(trans),6-dienyl propanoate
105-91-9		3,7-Dimethyl-2(cis),6-octadienyl propanoate
105-95-3	Ethylene glycol brassylate, cyclic diester; Ethyl brassylate; Ethylene brassylate; Ethylene undecane dicarboxylate	1,4-Dioxacycloheptadecan-5,17-dione
106-02-5	Exaltolide; omega-Pentadecalactone; Angelica lactone; Muscolactone; 15-Hydroxytetradecanoic acid; 1,15-epoxypentadecan-1-one; omega-lactone, 15-Pentadecanolide	
106-18-3	Butyl laurate	
106-21-8	Tetrahydrogeraniol	
106-22-9		3,7-Dimethyloct-6-en-1-ol
106-23-0		3,7-Dimethyloct-6-enal
106-24-1		3,7-Dimethylocta-2(trans),6-dien-1-ol
106-25-2	Nerolol; Neraniol	3,7-Dimethyl-2(cis),6-octadien-1-ol
106-26-3		3,7-Dimethyl-2(cis),6-octadienal
106-27-4	Isoamyl butyrate; Isoamyl n-butyrate	
106-29-6		3,7-Dimethylocta-2(trans),6-dienyl butanoate
106-30-9	Ethyl heptylate; Ethyl heptoate	
106-32-1	Ethyl caprylate	
106-33-2	Ethyl laurate; Ethyl dodecylate	
106-35-4	Ethyl butyl ketone	
106-36-5	Propyl propanoate; n-Propyl propionate	
106-44-5	p-Cresol; 4-Hydroxytoluene; 1-Methyl-4-hydroxybenzene	
106-65-0		Dimethylbutanedioate
106-68-3	Ethyl amyl ketone	
106-70-7	Methyl caproate	
106-72-9	Melonal	
106-73-0	Methyl heptoate	
107-02-8		
107-03-9	Propyl mercaptan	
107-10-8		
107-18-6	Allyl alcohol	
107-22-2	Glyoxal	

CAS	Name	FEMA	CoE	EINECS	Comments
107-31-3	Methyl formate		10795	203-481-7	
107-35-7	Taurine	3813		203-483-8	(1)
107-74-4	3,7-Dimethyloctane-1,7-diol	2586	559	203-517-1	
107-75-5	3,7-Dimethyl-7-hydroxyoctanal	2583	100	203-518-7	
107-85-7	3-Methylbutylamine	3219	512	203-526-0	
107-86-8	3-Methylcrotonaldehyde	3646	10354	203-527-6	
107-87-9	Pentan-2-one	2842	754	203-528-1	
107-88-0	Butane-1,3-diol			203-529-7	
107-92-6	Butyric acid	2221	5	203-532-3	
107-95-9	beta-Alanine	3252		203-536-5	(1)
107-96-0	3-Mercaptopropionic acid		11709	203-537-0	
108-10-1	3-Methylpentan-2-one	2731	151	203-550-1	
108-11-2	4-Methylpentan-2-ol		10279	203-551-7	
108-21-4	Isopropyl acetate	2926	193	203-561-1	
108-22-5	iso-Propenyl acetate			203-562-7	
108-29-2	Pentano-1,4-lactone	3103	757	203-569-5	
108-39-4	3-Methylphenol	3530	617	203-577-9	
108-46-3	Benzene-1,3-diol	3589	11250	203-585-2	
108-47-4	2,4-Dimethylpyridine			203-586-8	
108-48-5	2,6-Dimethylpyridine	3540	11381	203-587-3	
108-50-9	2,6-Dimethylpyrazine	3273	2211	203-589-4	
108-59-8	Dimethyl malonate		11754	203-597-8	
108-64-5	Ethyl isovalerate	2463	442	203-602-3	
108-68-9	3,5-Dimethylphenol		538	203-606-5	
108-75-8	2,4,6-Trimethylpyridine			203-613-3	
108-82-7	2,6-Dimethylheptan-4-ol	3140	11719	203-619-6	
108-83-8	2,6-Dimethylheptan-4-one	3537	11914	203-620-1	
108-84-9	1,3-Dimethylbutyl acetate		2073	203-621-7	
108-89-4	4-Methylpyridine		11416	203-626-4	
108-93-0	Cyclohexanol		2138	203-630-6	
108-94-1	Cyclohexanone		11047	203-631-1	
108-95-2	Phenol	3223	11811	203-632-7	
108-98-5	Thiophenol	3616	11585	203-635-3	
108-99-6	3-Methylpyridine		11801	203-636-9	
109-05-7	2-Methylpiperidine			203-642-1	
109-06-8	2-Methylpyridine		11415	203-643-7	
109-08-0	2-Methylpyrazine	3309	2270	203-645-8	
109-15-9	Octyl isobutyrate	2808	593	203-651-0	
109-19-3	Butyl isovalerate	2218	444	203-654-7	
109-20-6	Geranyl isovalerate	2518	448	203-655-2	
109-21-7	Butyl butyrate	2186	268	203-656-8	
109-25-1	Isopentyl heptanoate		10719	203-658-9	
109-29-5	Hexadecano-1,16-lactone			203-662-0	
109-42-2	Butyl undec-10-enoate	2216	2103	203-670-4	
109-43-3	Dibutyl sebacate	2373	622	203-672-5	
109-49-9	Hex-5-en-2-one			203-675-1	

CAS	Synonyms	Systematic name
107-31-3		
107-35-7		2-Aminoethanesulfonic acid
107-74-4	Hydroxycitronellol; 7-Hydroxy-3,7-dimethyloctan-1-ol	
107-75-5	Hydroxycitronellal; 7-hydroxy-3,7-dimethyloctan-1-al	
107-85-7	Isoamylamine; isoPentylamine	
107-86-8		3-Methylbut-2(trans)-enal
107-87-9	Methyl propyl ketone	
107-88-0	1,3- Butylene glycol	
107-92-6	Butanoic acid	
107-95-9		3-Aminopropanoic acid
107-96-0		
108-10-1	Methyl isobutyl ketone	
108-11-2		
108-21-4		
108-22-5		
108-29-2	gamma-Valerolactone; 4-Hydroxypentanoic acid lactone; gamma-methyl-gamma-butyrolactone; gamma-pentalactone; 4-valerolactone; 4-pentanolide	
108-39-4	m-Cresol	
108-46-3	1,3- Dihydroxybenzene; Resorcinol	
108-47-4		
108-48-5		
108-50-9	2,6- Dimethyl-1,4-diazine	
108-59-8	Dimethyl azelate	Dimethyl propanedioate
108-64-5		Ethyl 3-methylbutanoate
108-68-9		
108-75-8		
108-82-7	Di-isobutyl carbinol	
108-83-8		
108-84-9	4- Methyl-2-pentyl acetate; Methyl isobutyl carbonyl acetate	
108-89-4	gamma-Picoline; 4-Picoline	
108-93-0	Hexalin; Hexahydrophenol	
108-94-1		
108-95-2		
108-98-5	Benzenethiol	
108-99-6	beta-Picoline; 3-Picoline	
109-05-7		
109-06-8	alpha-Picoline; 2-Picoline	
109-08-0	2- Methyl-1,4-diazine	
109-15-9		Octyl 2-methylpropanoate
109-19-3		Butyl-3-methylbutanoate
109-20-6	Geranyl 3-methylbutyrate	3,7-Dimethylocta-2(trans),6-dienyl 3-methylbutanoate
109-21-7		
109-25-1		3-Methylbutyl heptanoate
109-29-5	Dihydroambrettolide	
109-42-2	Butyl undecylenate	
109-43-3		Dibutyl decane-1,10-dioate
109-49-9		

CAS	Name	FEMA	CoE	EINECS	Comments
109-52-4	Valeric acid	3101	7	203-677-2	
109-60-4	Propyl acetate	2925	192	203-686-1	
109-73-9	Butylamine	3130	524	203-699-2	
109-79-5	Butane-1-thiol	3478	526	203-705-3	
109-80-8	Propane-1,3-dithiol	3588	11929	203-706-9	
109-87-5	Dimethoxymethane		10031	203-714-2	
109-89-7	Diethylamine		10470	203-716-3	
109-94-4	Ethyl formate	2434	339	203-721-0	
109-95-5	Ethyl nitrite	2446	11869	203-722-6	(4)
109-97-7	Pyrrrole	3386	2318	203-724-7	
110-01-0	Tetrahydrothiophene			203-728-9	
110-02-1	Thiophene		11647	203-729-4	
110-12-3	5-Methylhexan-2-one		2144	203-737-8	
110-15-6	Succinic acid		24	203-740-4	(1)
110-16-7	cis-2-Butenedioic acid			203-742-5	
110-17-8	Fumaric acid	2488	25	203-743-0	(1)
110-19-0	Isobutyl acetate	2175	195	203-745-1	
110-27-0	Isopropyl tetradecanoate	3556	386	203-751-4	
110-34-9	Isobutyl hexadecanoate		10715	203-758-2	
110-36-1	Butyl tetradecanoate			203-759-8	
110-38-3	Ethyl decanoate	2432	309	203-761-9	
110-39-4	Octyl butyrate	2807	272	203-762-4	
110-40-7	Diethyl sebacate	2376	623	203-764-5	
110-41-8	2-Methylundecanal	2749	2010	203-765-0	
110-42-9	Methyl decanoate		2304	203-766-6	
110-43-0	Heptan-2-one	2544	136	203-767-1	
110-44-1	Hexa-2,4-dienoic acid			203-768-7	
110-45-2	3-Methylbutyl formate	2069	500	203-769-2	
110-58-7	Pentylamine		11734	203-780-2	
110-62-3	Pentanal	3098	93	203-784-4	
110-66-7	Pentane-1-thiol			203-789-1	
110-74-7	Propyl formate	2943	340	203-798-0	
110-81-6	Diethyl disulfide		533	203-805-7	
110-85-0	Piperazine			203-808-3	
110-86-1	Pyridine	2966	604	203-809-9	
110-89-4	Piperidine	2908	675	203-813-0	
110-93-0	6-Methylhept-5-en-2-one	2707	149	203-816-7	
110-94-1	Glutaric acid			203-817-2	(1)
111-06-8	Butyl hexadecanoate			203-829-8	
111-11-5	Methyl octanoate	2728	398	203-835-0	
111-12-6	Methyl 2-octynoate	2729	481	203-836-6	
111-13-7	Octan-2-one	2802	153	203-837-1	
111-14-8	Heptanoic acid	3348	28	203-838-7	(1)
111-15-9	2-Ethoxyethyl acetate		10565	203-839-2	
111-26-2	Hexylamine		10478	203-851-8	
111-27-3	Hexan-1-ol	2567	53	203-852-3	
111-28-4	Hexa-2,4-dien-1-ol			203-853-9	

CAS	Synonyms	Systematic name
109-52-4	Pentanoic acid	
109-60-4		
109-73-9		
109-79-5		
109-80-8		
109-87-5	Formaldehyde dimethyl acetal	
109-89-7	N-Ethylethylamine	
109-94-4	Formic ether	
109-95-5	Nitrous ether	
109-97-7		
110-01-0		
110-02-1		
110-12-3	Isoamyl methyl ketone	
110-15-6		Butanedioic acid
110-16-7	Maleic acid	
110-17-8		But-2(trans)-enedioic acid
110-19-0		2-Methylpropyl acetate
110-27-0	Isopropyl myristate	
110-34-9	Isobutyl palmitate	2-Methylpropyl hexadecanoate
110-36-1	Butyl myristate	
110-38-3	Ethyl caprate; Ethyl decylate	
110-39-4		
110-40-7	Ethyl sebacate	Diethyl decanedioate
110-41-8	Methyl nonyl acetaldehyde; Aldehyde C-12; MNA	
110-42-9		
110-43-0	Methyl amyl ketone; Amyl methyl ketone	
110-44-1		
110-45-2	Isoamyl formate; Isopentyl formate	
110-58-7	Amylamine	
110-62-3	Valeraldehyde; Valeral; n-Valeric aldehyde	
110-66-7		
110-74-7		
110-81-6		
110-85-0		
110-86-1		
110-89-4		
110-93-0	Methyl heptenone	
110-94-1		Pentanedioic acid
111-06-8	Butyl palmitate	
111-11-5		
111-12-6	Methyl heptene carbonate	
111-13-7	Methyl hexyl ketone; n-Hexyl methyl ketone	
111-14-8	n-Heptanoic; Enanthic; n-Heptylic; n-Heptoic acid; Oenanthic	
111-15-9	Ethylene glycol monoethyl ether acetate	
111-26-2		
111-27-3	Alcohol C-6; n-Hexyl alcohol	
111-28-4		

CAS	Name	FEMA	CoE	EINECS	Comments
111-30-8	Glutaraldehyde			203-856-5	
111-31-9	Hexane-1-thiol		11487	203-857-0	
111-45-5	2-(2-Propenyloxy)-ethanol			203-871-7	
111-47-7	Dipropyl sulfide		541	203-873-8	
111-61-5	Ethyl octadecanoate	3490	745	203-887-4	
111-62-6	Ethyl oleate	2450	633	203-889-5	
111-70-6	Heptan-1-ol	2548	70	203-897-9	
111-71-7	Heptanal	2540	117	203-898-4	
111-76-2	2-Butoxyethan-1-ol		10182	203-905-0	
111-79-5	Methyl non-2-enoate	2725	2099	203-908-7	
111-80-8	Methyl 2-nonynoate	2726	479	203-909-2	
111-82-0	Methyl dodecanoate	2715	377	203-911-3	
111-87-5	Octan-1-ol	2800	54	203-917-6	
112-05-0	Nonanoic acid	2784	29	203-931-2	
112-06-1	Heptyl acetate	2547	212	203-932-8	
112-07-2	2-Butoxyethyl acetate			203-933-3	
112-12-9	Undecan-2-one	3093	150	203-937-5	
112-14-1	Octyl acetate	2806	197	203-939-6	
112-17-4	Decyl acetate	2367	199	203-942-2	
112-19-6	Undec-10-enyl acetate	3096	2062	203-944-3	
112-23-2	Heptyl formate	2552	341	203-949-0	
112-30-1	Decan-1-ol	2365	73	203-956-9	
112-31-2	Decanal	2362	98	203-957-4	
112-32-3	Octyl formate	2809	342	203-959-5	
112-37-8	Undecanoic acid	3245	696	203-964-2	
112-38-9	Undec-10-enoic acid	3247	689	203-965-8	
112-39-0	Methyl hexadecanoate		581	203-966-3	
112-40-3	Dodecane			203-967-9	
112-41-4	Dodec-1-ene		10992	203-968-4	
112-42-5	Undecan-1-ol	3097	751	203-970-5	
112-43-6	Undec-10-en-1-ol		10319	203-971-0	
112-44-7	Undecanal	3092	121	203-972-6	
112-45-8	Undec-10-enal	3095	122	203-973-1	
112-53-8	Dodecan-1-ol	2617	56	203-982-0	
112-54-9	Dodecanal	2615	99	203-983-6	
112-55-0	Dodecyl mercaptan			203-984-1	
112-61-8	Methyl octadecanoate		10849	203-990-4	
112-62-9	Methyl oleate		10836	203-992-5	
112-63-0	Methyl linoleate	3411	713	203-993-0	
112-66-3	Dodecyl acetate	2616	200	203-995-1	
112-72-1	Tetradecan-1-ol		10314	204-000-3	
112-80-1	Oleic acid	2815	13	204-007-1	(1)
112-92-5	Octadecan-1-ol			204-017-6	
115-18-4	2-Methylbut-3-en-2-ol		11794	204-068-4	
115-71-9	12-alpha-Santalol-14-ol	3006	74	204-102-8	(4)
115-95-7	Linalyl acetate	2636	203	204-116-4	
115-99-1	Linalyl formate	2642	347	204-120-6	

CAS	Synonyms	Systematic name
111-30-8		Pentan-1,5-dial
111-31-9		
111-45-5	Ethylene glycol monoallyl ether	
111-47-7		
111-61-5	Ethyl stearate	
111-62-6		Ethyl octadec-9-enoate
111-70-6	Heptyl alcohol; Alcohol C-7	
111-71-7	Aldehyde C-7; n-Heptaldehyde	
111-76-2	Ethylene glycol monobutyl ether	
111-79-5	Methyl nonylenate	
111-80-8	Methyl octine carbonate; Methyl octyne carbonate	
111-82-0	Methyl laurate	
111-87-5	Alcohol C-8; n-octyl alcohol	
112-05-0	Pelargonic acid; Octane-1-carboxylic acid	
112-06-1	Acetate C-7; Heptanyl acetate	
112-07-2		
112-12-9	Methyl nonyl ketone; 2-hendecanone; Undecanone-2	
112-14-1	Acetate C-8; n-Octanyl acetate	
112-17-4	Acetate C-10	
112-19-6		
112-23-2	n-Heptyl methanoate	
112-30-1	Alcohol C-10; n-Decyl alcohol	
112-31-2	Aldehyde C-10; Decyl aldehyde; Capraldehyde	
112-32-3		
112-37-8		
112-38-9	Undecylenic acid	
112-39-0	Methyl palmitate	
112-40-3		
112-41-4		
112-42-5	Alcohol C-11, undecylic; Undecyl alcohol	
112-43-6	Undecen-1-ol; Alcohol C-11; Undecylenic alcohol	
112-44-7	Undecanoic aldehyde	
112-45-8	Undecylenic aldehyde (mixed isomers); Internal isomers; Undecenal; Intreleven aldehyde; Aldehyde C-11	
112-53-8	Lauryl alcohol; Alcohol C-12; Lauric alcohol	
112-54-9	Lauric aldehyde; Aldehyde C-12; Lauryl Aldehyde; n-dodecylic aldehyde; Duodecylic aldehyde	
112-55-0		Dodecane-1-thiol
112-61-8	Methyl stearate	
112-62-9		Methyl octadec-9-enoate
112-63-0	Methyl octadeca-9(cis),12(cis)-dienoate	
112-66-3	Lauryl acetate; Acetate C-12	
112-72-1	Myristyl alcohol; Alcohol C-14; Myristic alcohol	
112-80-1		Octadec-9-enoic acid
112-92-5		
115-18-4		
115-71-9		
115-95-7	Bergamol	1,5-Dimethyl-1-vinylhex-4-enyl acetate
115-99-1		1,5-Dimethyl-1-vinylhex-4-enyl formate

CAS	Name	FEMA	CoE	EINECS	Comments
116-02-9	3,3,5-Trimethylcyclohexan-1-ol			204-122-7	
116-09-6	1-Hydroxypropan-2-one		11101	204-124-8	
116-26-7	2,6,6-Trimethylcyclohexa-1,3-diene-1-carbaldehyde	3389	10383	204-133-7	
116-53-0	2-Methylbutyric acid	2695	2002	204-145-2	
117-98-6	Vetiveryl acetate		11887	204-225-7	
118-55-8	Phenyl salicylate		11814	204-259-2	
118-58-1	Benzyl salicylate	2151	436	204-262-9	
118-61-6	Ethyl salicylate	2458	432	204-265-5	
118-71-8	Maltol	2656	148	204-271-8	
118-72-9	2,6-(Dimethyl)thiophenol	3666		204-272-3	
118-93-4	2-Hydroxyacetophenone	3548	11784	204-288-0	
119-36-8	Methyl salicylate	2745	433	204-317-7	
119-53-9	Benzoin	2132	162	204-331-3	
119-61-9	Benzophenone	2134	166	204-337-6	
119-65-3	Isoquinoline	2978	487	204-341-8	
119-84-6	3,4-Dihydrocoumarin	2381	535	204-354-9	
120-11-6	Benzyl isoeugenyl ether	3698	522	204-370-6	
120-14-9	Veratraldehyde	3109	106	204-373-2	
120-24-1	Isoeugenyl phenylacetate	2477	237	204-381-6	
120-25-2	4-Ethoxy-3-methoxybenzaldehyde		703	204-382-1	
120-45-6	1-Phenethyl propionate	2689	425	204-397-3	
120-47-8	Ethyl 4-hydroxybenzoate			204-399-4	(4)
120-50-3	Isobutyl benzoate	2185	567	204-401-3	
120-51-4	Benzyl benzoate	2138	262	204-402-9	
120-57-0	Piperonal	2911	104	204-409-7	
120-72-9	Indole	2593	560	204-420-7	
120-75-2	2-Methyl-4,5-benzothiazole			204-423-3	
120-80-9	Benzene-1,2-diol		680	204-427-5	
120-92-3	Cyclopentanone		11050	204-435-9	
120-94-5	1-Methylpyrrolidine			204-438-5	
121-32-4	Ethyl vanillin	2464	108	204-464-7	
121-33-5	Vanillin	3107	107	204-465-2	
121-34-6	Vanillic acid		697	204-466-8	
121-39-1	Ethyl 3-phenyl-2,3-epoxypropionate	2454	11844	204-467-3	
121-44-8	Triethylamine		10496	204-469-4	
121-98-2	Methyl 4-methoxybenzoate	2679	248	204-513-2	
122-00-9	4-Methylacetophenone	2677	156	204-514-8	
122-03-2	4-Isopropylbenzaldehyde	2341	111	204-516-9	
122-40-7	alpha-Pentylcinnamaldehyde	2061	128	204-541-5	

CAS	Synonyms	Systematic name
116-02-9		
116-09-6	Hydroxyacetone; Acetyl carbinol	
116-26-7	Safranal	
116-53-0		
117-98-6	Vetiver acetate; Vetivert acetate	2,6-Dimethyl-9-(1-methylethylidene)-bicyclo[5.3.0]dec-2-en-4-yl acetate
118-55-8	Salol	Phenyl-o-hydroxybenzoate
118-58-1		Benzyl 2-hydroxybenzoate
118-61-6		Ethyl 2-hydroxybenzoate
118-71-8	Veltol (Pfizer); Corps praline	3-Hydroxy-2-methyl-4-pyrone
118-72-9	2,6-Dimethylbenzenethiol	
118-93-4		
119-36-8		Methyl 2-hydroxybenzoate
119-53-9	Benzoyl phenyl carbinol	2-Hydroxy-2-phenylacetophenone
119-61-9	Benzoylbenzene; Diphenyl ketone	
119-65-3		
119-84-6	Dihydrocoumarin; 1,2- Benzodihydropyrone; Hydrocoumarin; Melilotine	
120-11-6	Benzyl isoeugenol; Isoeugenyl benzyl ether; Benzyl 2-methoxy-4-propenylphenyl ether	Benzyl 2-methoxy-4-prop-1-enylphenyl ether
120-14-9	O-Methyl vanillin; p-Veratric aldehyde	3,4-Dimethoxybenzaldehyde
120-24-1		2-Methoxy-4-(prop-1-enyl)phenyl phenylacetate
120-25-2	Vanillin ethyl ether	
120-45-6	alpha-Methylbenzyl propionate; Styrallyl propionate	
120-47-8		
120-50-3		2-Methylpropyl benzoate
120-51-4	Benzoic acid benzyl ester	
120-57-0	Heliotropine	3,4-Methylenedioxybenzaldehyde
120-72-9	Benzopyrrole; 1-benzazole	
120-75-2		
120-80-9	Catechol	
120-92-3		
120-94-5		
121-32-4		3-Ethoxy-4-hydroxybenzaldehyde
121-33-5	Methyl protocatechuic aldehyde; Protocatechualdehyde-3-methylether	4-Hydroxy-3-methoxybenzaldehyde
121-34-6		4-Hydroxy-3-methoxybenzoic acid
121-39-1	Ethyl 3-phenylglycidate; Ethyl alpha,beta-epoxy-alpha-phenylpropionate	
121-44-8	N,N-diethylethylamine	
121-98-2	Methyl p-anisate; Methyl anisate; Methyl-p-methoxybenzoate	
122-00-9	p-Methylacetophenone; Methyl p-tolyl ketone	
122-03-2	Cuminaldehyde; Cuminic aldehyde; p-isopropylbenzaldehyde	
122-40-7	alpha-Amylcinnamaldehyde	2-Pentyl-3-phenylprop-2-enal

CAS	Name	FEMA	CoE	EINECS	Comments
122-43-0	Butyl phenylacetate	2209	2159	204-543-6	
122-45-2	Octyl phenylacetate	2812	230	204-545-7	
122-48-5	Vanillyl acetone	3124	139	204-548-3	
122-51-0	Triethoxymethane		10903	204-550-4	
122-57-6	4-Phenylbut-3-en-2-one	2881	158	204-555-1	
122-59-8	Phenoxyacetic acid	2872	2005	204-556-7	
122-63-4	Benzyl propionate	2150	413	204-559-3	
122-67-8	Isobutyl cinnamate	2193	327	204-564-0	
122-68-9	3-Phenylpropyl cinnamate	2894	338	204-565-6	
122-69-0	Cinnamyl cinnamate	2298	332	204-566-1	
122-70-3	Phenethyl propionate	2867	418	204-567-7	
122-71-4	1,1-Diphenethoxyethane			204-568-2	
122-72-5	3-Phenylpropyl acetate	2890	222	204-569-8	
122-74-7	3-Phenylpropyl propionate	2897	419	204-571-9	
122-78-1	Phenylacetaldehyde	2874	116	204-574-5	
122-79-2	Phenyl acetate		10878	204-575-0	
122-84-9	4-Methoxyphenylacetone	2674	11836	204-578-7	
122-91-8	p-Anisyl formate	2101	354	204-582-9	
122-97-4	3-Phenylpropan-1-ol	2885	80	204-587-6	
123-05-7	2-Ethylhexanal		10331	204-596-5	
123-07-9	4-Ethylphenol	3156	550	204-598-6	
123-08-0	4-Hydroxybenzaldehyde		558	204-599-1	
123-11-5	4-Methoxybenzaldehyde	2670	103	204-602-6	
123-15-9	2-Methylpentanal	3413	706	204-605-2	
123-19-3	Heptan-4-one	2546	2034	204-608-9	
123-25-1	Diethyl succinate	2377	438	204-612-0	
123-29-5	Ethyl nonanoate	2447	388	204-615-7	
123-31-9	Quinol		11249	204-617-8	
123-32-0	2,5-Dimethylpyrazine	3272	2210	204-618-3	
123-35-3	Myrcene	2762	2197	204-622-5	
123-38-6	Propanal	2923	90	204-623-0	
123-42-2	4-Hydroxy-4-methylpentan-2-one			204-626-7	
123-51-3	Isopentanol	2057	51	204-633-5	
123-54-6	Pentan-2,4-dione		11036	204-634-0	
123-63-7	2,4,6-Trimethyl-1,3,5-trioxane		594	204-639-8	
123-66-0	Ethyl hexanoate	2439	310	204-640-3	
123-68-2	Allyl hexanoate	2032	2181	204-642-4	
123-69-3	Hexadec-7-en-1,16-lactone		180	203-644-5	
123-72-8	Butanal	2219	91	204-646-6	
123-73-9	But-2-enal		11736	204-647-1	

CAS	Synonyms	Systematic name
122-43-0		
122-45-2		
122-48-5	Zingerone; 3-Methoxy-4-hydroxy-benzylacetone	4-(4-Hydroxy-3-methoxyphenyl)butan-2-one
122-51-0	Triethyl orthoformate; Ethyl orthoformate	
122-57-6	Benzylidene acetone; Cinnamyl methyl ketone	
122-59-8	Glycollic acid phenyl ether; Phenoxyethanoic acid; o-phenylglycollic acid	
122-63-4	Benzyl propanoate	
122-67-8		2-Methylpropyl 3-phenylprop-2-enoate
122-68-9	Hydrocinnamylcinnamate; Phenylpropyl cinnamate	3-Phenylpropyl 3-phenylprop-2-enoate
122-69-0	Phenylallyl cinnamate; Styracin	3-Phenylprop-2-enyl 3-Phenylprop-2-enoate
122-70-3	Phenylethyl propionate	
122-71-4	Acetaldehyde diphenethyl acetal	
122-72-5	Phenylpropyl acetate; 3-phenyl-1-propyl acetate; Hydrocinnamyl acetate	
122-74-7	Phenylpropylpropionate	
122-78-1		
122-79-2		
122-84-9	Anisyl methyl ketone; 3-(4-Methoxyphenyl)propan-2-one; p-Methoxyphenylacetone; Anisketone; Anisic ketone	
122-91-8		4-Methoxybenzyl formate
122-97-4	Hydrocinnamyl alcohol; Phenylpropyl alcohol	
123-05-7	2-Ethyl hexaldehyde	
123-07-9		
123-08-0		
123-11-5	p-Anisaldehyde; aubepine; Anisic aldehyde	
123-15-9		
123-19-3	Dipropyl ketone	
123-25-1	Ethyl succinate	Diethyl butanedioate
123-29-5	Ethyl pelargonate	
123-31-9	Hydroquinone	1,4-Dihydroxybenzene
123-32-0	2,5-Dimethyl-1,4-diazine; Glycoline; Ketine	
123-35-3		7-Methyl-3-methyleneocta-1,6-diene
123-38-6	Propionaldehyde	
123-42-2		
123-51-3	Isoamyl alcohol; Isopentyl alcohol	3-Methylbutan-1-ol
123-54-6	Acetylacetone	
123-63-7	Paraldehyde	
123-66-0	Ethyl caproate	
123-68-2	Allyl caproate; 2-Propenyl hexanoate	
123-69-3		
123-72-8	n-butyraldehyde; Butyl aldehyde; butyric aldehyde	
123-73-9		

CAS	Name	FEMA	CoE	EINECS	Comments
123-75-1	Pyrrolidine	3523	10491	204-648-7	
123-76-2	4-Oxovaleric acid	2627	23	204-649-2	(1)
123-86-4	Butyl acetate	2174	194	204-658-1	
123-92-2	Isopentyl acetate	2055	214	204-662-3	
123-95-5	Butyl octadecanoate	2214	2189	204-666-5	
123-96-6	Octan-2-ol	2801	71	204-667-0	
123-99-9	Nonanedioic acid		10079	204-669-1	
124-04-9	Adipic acid	2011	26	204-673-3	(1)
124-06-1	Ethyl tetradecanoate	2445	385	204-675-4	
124-07-2	Octanoic acid	2799	10	204-677-5	(1)
124-10-7	Methyl tetradecanoate	2722	387	204-680-1	
124-13-0	Octanal	2797	97	204-683-8	
124-19-6	Nonanal	2782	114	204-688-5	
124-25-4	Tetradecanal	2763	118	204-692-7	
124-40-3	Dimethylamine		10473	204-697-4	
124-76-5	Isoborneol	2158	2020	204-712-4	
125-12-2	Isobornyl acetate	2160	2066	204-727-6	
126-14-7	Sucrose octaacetate	3038	11819	204-772-1	
126-64-7	Linalyl benzoate	2638	654	204-796-2	
127-17-3	Pyruvic acid	2970	19	204-824-3	
127-41-3	alpha-Ionone	2594	141	204-841-6	
127-42-4	Methyl-alpha-ionone	2711	143	204-842-1	
127-43-5	Methyl-beta-ionone	2712	144	204-843-7	
127-51-5	alpha-Isomethyl ionone	2714	169	204-846-3	
127-91-3	Pin-2(10)-ene	2902	2113	204-872-5	
128-50-7	2-(6,6-Dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethan-1-ol			204-890-3	
128-51-8	Nopyl acetate			204-891-9	
130-89-2	Quinine hydrochloride	2976	715	205-001-1	(3)
130-95-0	Quinine			205-003-2	(3)
133-18-6	Phenethyl anthranilate	2859	258	205-098-0	
133-37-9	Tartaric acid	3044	18	205-105-7	(1)
134-20-3	Methyl anthranilate	2682	250	205-132-4	
134-28-1	Guaiyl acetate		10659	205-135-0	
134-96-3	4-Hydroxy-3,5-dimethoxybenzaldehyde		10340	205-167-5	
135-02-4	2-Methoxybenzaldehyde		10350	205-171-7	
136-60-7	Butyl benzoate		740	205-252-7	
137-00-8	5-(2-Hydroxyethyl)-4-methylthiazole	3204	11621	205-272-6	
137-06-4	2-Methylbenzene-1-thiol	3240	2272	205-276-8	
137-32-6	2-Methylbutan-1-ol		2346	205-289-9	
138-22-7	Butyl lactate	2205	372	205-316-4	
138-86-3	Limonene	2633	491	205-341-0	
138-87-4	beta-Terpineol	3564	10254	205-342-6	
139-45-7	Glyceryl tripropionate	3286	10657	205-365-1	(1)
139-70-8	Citronellyl phenylacetate	2315	2157	205-373-5	
139-85-5	3,4-Dihydroxybenzaldehyde		10328	205-377-7	
140-11-4	Benzyl acetate	2135	204	205-399-7	

CAS	Synonyms	Systematic name
123-75-1		Tetrahydropyrrole
123-76-2	Laevulinic acid; Acetopropionic acid; Laevulic acid; Levulinic acid, 4-Oxopentanoic acid	
123-86-4		
123-92-2	Isoamyl acetate	3-Methylbutyl acetate
123-95-5	Butyl stearate	
123-96-6		
123-99-9	Azelaic acid	
124-04-9		Hexanedioic acid
124-06-1	Ethyl myristate	
124-07-2	Caprylic acid	
124-10-7	Methyl myristate	
124-13-0	Aldehyde C-8; Octyl aldehyde	
124-19-6	Pelargonic aldehyde; Aldehyde C-9; Pelargonaldehyde	
124-25-4	Myristaldehyde; Aldehyde C-14; Myristic aldehyde	
124-40-3		
124-76-5	Isocamphol	1,7,7-Trimethylbicyclo[2.2.1]heptan-2-ol
125-12-2		1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl acetate
126-14-7	Octaacetylsucrose	
126-64-7		1,5-Dimethyl-1-vinylhex-4-enyl benzoate
127-17-3		2-Oxopropanoic acid
127-41-3		4-(2,6,6-Trimethylcyclohex-2-enyl)but-3-en-2-one
127-42-4		1-(2,6,6-Trimethylcyclohex-2-enyl)pent-1-en-3-one
127-43-5		1-(2,6,6-Trimethylcyclohex-1-enyl)pent-1-en-3-one
127-51-5		4-(2,6,6-Trimethylcyclohex-2-enyl)-3-methylpent-3-en-2-one
127-91-3	beta-Pinene; Norpinene; Terbenthene	6,6-Dimethyl-2-methylenebicyclo[3.1.1]heptane
128-50-7	Nopol	
128-51-8	Lignyl acetate	6,6-Dimethyl-bicyclo[3.1.1]hept-2-ene-2-ethyl acetate
130-89-2		
130-95-0		
133-18-6		2-Phenylethyl 2-aminobenzoate
133-37-9		2,3-Dihydroxybutanedioic acid
134-20-3		Methyl 2-aminobenzoate
134-28-1	Guaiol acetate; Guaiacwood acetate; Guaiac acetate	6,10-Dimethyl-3-(1-methyl ethyl acetate)-bicyclo[5.3.0]dec-1(7)-ene
134-96-3		
135-02-4	o-methoxybenzaldehyde; o-Anisaldehyde	
136-60-7		
137-00-8	4-Methyl-5-thiazole ethanol; sulfurol	
137-06-4	o-Toluenethiol	
137-32-6		
138-22-7	Butyl alpha-hydroxypropionate	Butyl 2-hydroxypropanoate
138-86-3	Dipentene	
138-87-4		p-Menth-8(10)-en-1-ol
139-45-7	Tripropionin	
139-70-8		3,7-Dimethyloct-6-enyl phenylacetate
139-85-5		
140-11-4		

CAS	Name	FEMA	CoE	EINECS	Comments
140-25-0	Benzyl dodecanoate			205-405-8	
140-26-1	Phenethyl isovalerate	2871	461	205-406-3	
140-27-2	Cinnamyl isovalerate	2302	454	205-407-9	
140-39-6	p-Tolyl acetate	3073	226	205-413-1	
140-67-0	1-Allyl-4-methoxybenzene	2411	184	205-427-8	(2)-(3)
140-88-5	Ethylacrylate	2418	245	205-438-8	
141-03-7	Dibutyl succinate			205-449-8	
141-05-9	Diethyl maleate		10551	205-451-9	
141-06-0	Propyl valerate		679	205-452-4	
141-09-3	Rhodinyl formate	2984	346	205-456-6	
141-10-6	Pseudo-ionone		11191	205-457-1	
141-11-7	Rhodinyl acetate	2981	223	205-458-7	
141-12-8	Neryl acetate	2773	2061		
141-14-0	Citronellyl propionate	2316	410	205-461-3	
141-16-2	Citronellyl butyrate	2312	275	205-463-4	
141-25-3	Rhodinol	2980	76	205-473-9	
141-27-5	trans-3;7-Dimethylocta-2,6-dienal	2303	109	205-476-5	
141-28-6	Diethyl adipate			205-477-0	
141-78-6	Ethyl acetate	2414	191	205-500-4	
141-79-7	4-Methylpent-3-en-2-one	3368	11853	205-502-5	
141-82-2	Malonic acid		2264	205-503-0	(1)
141-92-4	1,1-Dimethoxy-3,7-dimethyloctan-7-ol	2585	45	205-510-9	
141-97-9	Ethyl acetoacetate	2415	240	205-516-1	
142-08-5	2-Hydroxypyridine			205-520-3	
142-19-8	Allyl heptanoate	2031	369	205-527-1	
142-50-7	[S-(cis)]-3,7,11-Trimethyl-1,6,10-dodecatrien-3-ol		67	205-540-2	
142-60-9	Octyl propionate	2813	407	205-548-6	
142-62-1	Hexanoic acid	2559	9	205-550-7	(1)
142-77-8	Butyl oleate		741	205-559-6	
142-83-6	Hexa-2(trans),4(trans)-dienal	3429	640	205-564-3	
142-91-6	Isopropyl hexadecanoate		10732	205-571-1	
142-92-7	Hexyl acetate	2565	196	205-572-1	
143-07-7	Dodecanoic acid	2614	12	205-582-1	(1)
143-08-8	Nonan-1-ol	2789	55	205-583-7	
143-13-5	Nonyl acetate	2788	198	205-585-8	
143-14-6	Undec-9-enal	3094	123	205-586-3	
144-39-8	Linalyl propionate	2645	411	205-627-5	
147-85-3	l-Proline	3319	10490	205-702-2	(1)
149-57-5	2-Ethylhexanoic acid				
149-91-7	Gallicacid		10170	205-749-9	(1)
150-13-0	Pentyl benzoate		2307	205-753-0	
150-19-6	3-Methoxyphenol			205-754-6	
150-30-1	DL-Phenylalanine	3726	10488	205-756-7	
150-60-7	Dibenzyl disulfide	3617		205-764-0	
150-76-5	4-Methoxyphenol		11241	205-769-8	
150-78-7	1,4-Dimethoxybenzene	2386	2059	205-771-9	

CAS	Synonyms	Systematic name
140-25-0	Benzyl laurate	
140-26-1	Phenylethylisopentanoate	2-Phenylethyl 3-methylbutanoate
140-27-2	Cinnamyl-3-methylbutyrate	3-Phenylprop-2-enyl 3-methylbutanoate
140-39-6	p-Cresyl acetate; 4-methylbenzoic acid methyl ester	4-Methylphenyl acetate
140-67-0	Estragole	
140-88-5		Ethyl prop-2-enoate
141-03-7		Dibutyl butanedioate
141-05-9	2- Butenedioic acid diethyl ester; Ethyl maleate	Diethyl but-2(cis)-enedioate
141-06-0	Propyl pentanoate	
141-09-3	alpha-Citronellyl formate	3,7-Dimethyloct-7-enyl formate
141-10-6		6,10-Dimethylundeca-3,5,9-trien-2-one
141-11-7	alpha-Citronellyl acetate	3,7-Dimethyloct-7-enyl acetate
141-12-8		3,7-Dimethyl-2(cis),6-octadienyl acetate
141-14-0		3,7-Dimethyloct-6-enyl propanoate
141-16-2		3,7-Dimethyloct-6-enyl butanoate
141-25-3	alpha-Citronellol; 2,6-Dimethyl-1-octen-8-ol	3,7-Dimethyloct-7-en-1-ol
141-27-5	Geranial	
141-28-6		Diethyl hexanedioate
141-78-6	Acetic ether	
141-79-7	Mesityl oxide; Methyl isobutenyl ketone; Isopropylidene acetone	
141-82-2		Propanedioic acid
141-92-4	Hydroxycitronellal dimethyl acetal; Hydroxycitronellal dimethylacetal	
141-97-9	Acetoacetic ester	Ethyl 3-oxobutanoate
142-08-5		
142-19-8	Allyl heptylate; Allyl heptoate	
142-50-7		
142-60-9		
142-62-1	Caproic acid	
142-77-8		Butyl octadec-9-enoate
142-83-6		
142-91-6	Isopropyl palmitate	
142-92-7		
143-07-7	Lauric acid	
143-08-8	Alcohol C-9; Pelargonic alcohol	
143-13-5	Acetate C-9; Pelargonyl acetate	
143-14-6		
144-39-8		1,5-Dimethyl-1-vinylhex-4-enyl propanoate
147-85-3		Pyrrolidine-2-carboxylic acid
149-57-5		
149-91-7		3,4,5-Trihydroxybenzoic acid
150-13-0		
150-19-6		
150-30-1		
150-60-7		
150-76-5		
150-78-7	p-Dimethoxybenzene; Hydroquinone dimethyl ether; Dimethylhydroquinone	

CAS	Name	FEMA	CoE	EINECS	Comments
150-84-5	Citronellyl acetate	2311	202	205-775-0	
150-86-7	Phytol		10302	205-776-6	
150-90-3	Succinic acid, disodium salt		24	203-740-4	
151-05-3	1,1-Dimethyl-2-phenethyl acetate	2392	2077	205-781-3	
151-10-0	1,3-Dimethoxybenzene	2385	189	205-783-4	
151-19-9	3,6-Dimethyloctan-3-ol			205-787-6	
156-06-9	3-Phenylpyruvic acid			205-847-1	
288-47-1	Thiazole	3615	11642	206-021-3	
289-16-7	1,2,4-Trithiolane				
290-37-9	Pyrazine		11363	206-027-6	
291-22-5	1,2,4,5-Tetrathiane				
292-46-6	Lenthionine		11619		
301-00-8	Methyl linolenate	3411	714	206-102-3	
302-72-7	DL-Alanine		11729	206-126-4	(1)
302-84-1	Serine			206-130-6	(1)
326-61-4	Piperonyl acetate	2912	2068	206-312-5	
328-50-7	2-Oxoglutaric acid		653	206-330-3	
334-48-5	Decanoic acid	2364	11	206-376-4	
350-03-8	3-Acetylpyridine	3424	2316	206-496-7	
352-93-2	Diethyl sulfide		11450	206-526-9	
404-86-4	N-(4-Hydroxy-3-methoxybenzyl)-8-methylnon-6-enamide	3404	2299	206-969-8	
420-12-2	Diethylene sulfide			206-993-9	
431-03-8	Diacetyl	2370	752	207-069-8	
432-24-6	2,6,6-Trimethylcyclohex-2-ene-1-carboxaldehyde	3639	10326	207-080-8	
432-25-7	2,6,6-Trimethyl-2-cyclohexen-1-aldehyde	3639	2133	207-081-3	
443-79-8	d,l-Isoleucine	3295	10127	207-139-8	(1)
458-36-6	4-Hydroxy-3-methoxycinnamaldehyde		10342	207-278-4	
459-80-3	Geranic acid		10094	207-299-9	
462-95-3	Diethoxymethane		10012	207-330-6	
463-40-1	Octadeca-9,12,15-trienoic acid	3380	695	207-334-8	
464-07-3	3,3-Dimethylbutan-2-ol			207-347-9	
464-49-3	(1R)-1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one	2230	140	207-335-2	
469-61-4	alpha-Cedrene		10985	207-418-4	
470-67-7	1,4-Cineole	3658	11225	207-428-9	
470-82-6	1,8-Cineole	2465	182	207-431-5	
472-66-2	2,6,6-Trimethylcyclohex-1-en-1-acetaldehyde	3474	10338	207-454-0	
472-97-9	beta-Caryophyllene alcohol		10188	207-458-2	
473-67-6	Pin-2-en-4-ol	3594	10304	207-470-8	
475-03-6	1,2,3,4-Tetrahydro-1,1,6-trimethylnaphthalene			207-490-7	
475-20-7	Longifolene			207-491-2	
488-10-8	Methyl-2-(pent-2(cis)-enyl)cyclopent-2-en-1-one	3196	11786	207-668-4	
490-03-9	2-Hydroxypiperitone			207-704-9	
491-04-3	p-Menth-1-en-3-ol	3179	10248	207-725-3	
491-07-6	d,l-Isomenthone	3460	2259	207-727-4	
491-09-8	p-Mentha-1,4(8)-dien-3-one	3560	11189	207-729-5	

CAS	Synonyms	Systematic name
150-84-5		3,7-Dimethyloct-6-enyl acetate
150-86-7		3,7,11,15-Tetramethylhexadec-2-en-1-ol
150-90-3		
151-05-3	2-Methyl-1-phenyl-2-propyl acetate; Benzyl dimethyl carbinyl acetate; Dimethylbenzyl carbinyl acetate; alpha,alpha-Dimethylphenethyl acetate	
151-10-0	m-Dimethoxybenzene; Resorcinol dimethyl ether	
151-19-9		
156-06-9		3-Oxo-3-phenylpropanoic acid
288-47-1		
289-16-7		
290-37-9		
291-22-5		
292-46-6		1,2,3,5,6-Pentathiacycloheptane
301-00-8	Methyl octadeca-9(cis),12(cis),15(cis)-trienoate	
302-72-7		
302-84-1		2-Amino-3-hydroxypropanoic acid
326-61-4	Heliotropyl acetate; 3,4-Methylene dioxybenzyl acetate	3,4-Methylenedioxybenzyl acetate
328-50-7		2-Oxopentanedioic acid
334-48-5	Capric acid; Decylic acid	
350-03-8	Methyl-3-pyridyl ketone	
352-93-2	Ethyl thioethane	
404-86-4	Capsaicin; 8-Methylnon-6-enoyl 4-hydroxy-3-methoxybenzylamide	
420-12-2		
431-03-8	Dimethyldiketone; Biacetyl; 2,3-diketobutane	Butane-2,3-dione
432-24-6	beta-Cyclocitral	
432-25-7		
443-79-8		2-Amino-3-methylpentanoic acid
458-36-6		3-(4-Hydroxy-3-methoxyphenyl)prop-2-enal
459-80-3		3,7-Dimethyl-2(trans),6-octadienoic acid
462-95-3	Formaldehyde diethyl acetal	
463-40-1	Linolenic acid	
464-07-3		
464-49-3		
469-61-4		2,6,6,8-Tetramethyl-tricyclo[5.3.1.0(1.5)]undec-8-ene
470-67-7		1,4-Epoxy-p-menthane
470-82-6	Eucalyptol; 1,8-oxido-p-menthane	1,8-Epoxy-p-menthane
472-66-2	beta-Homocyclocitral	
472-97-9	Caryolan-1-ol	4,4,8-Trimethyl-tricyclo[6.3.1.0(2.5)]dodecan-1-ol
473-67-6	Verbenol	4,6,6-Trimethyl-bicyclo[3.1.1]hept-3-en-2-one
475-03-6	Ionene; 1,1,6-Trimethyltetraline, Frambileen	
475-20-7		Decahydro-4,8,8-trimethyl-9-methylene-1,4-methanoazulene
488-10-8	cis-Jasmone	
490-03-9		2-Hydroxy-menth-1-en-3-one
491-04-3	Piperitol	
491-07-6		cis-p-Menthan-3-one
491-09-8	Piperitenone	

CAS	Name	FEMA	CoE	EINECS	Comments
491-35-0	4-Methylquinoline		488	207-734-2	
492-37-5	2-Phenylpropionic acid		10164	207-752-0	
494-90-6	Menthofuran	3235	2265	207-795-5	(2)-(3)
494-99-5	1,2-Dimethoxy-4-methylbenzene			207-796-0	
495-40-9	1-Phenylbutan-1-one			207-799-7	
495-61-4	beta-Bisabolene				
495-62-5	1,4(8),12Bisabolatriene	3331	10979	207-805-8	
495-76-1	Piperonyl alcohol		10306	207-808-4	
496-77-5	5-Hydroxyoctan-4-one	2587	2045	207-830-4	
497-03-0	2-Methylcrotonaldehyde	3407	2281	207-833-0	
498-00-0	Vanillyl alcohol	3737	690	207-852-4	
498-02-2	Acetovanillone		11035	207-854-5	
498-16-8	Lavandulol				
498-36-2	2-Hydroxy-4-methylvaleric acid		10118	207-860-8	
498-81-7	p-Menthan-8-ol			207-871-8	
499-12-7	Prop-1-ene-1,2,3-tricarboxylic acid	2010	33	207-877-0	
499-54-7	3,7-Dimethyloctano-1,6-lactone	3355	11833	207-882-8	
499-69-4	p-Menthan-2-ol	3562	2228	207-885-4	
499-70-7	p-Menthan-2-one	3176	11128	207-887-5	
499-75-2	Carvacrol	2245	2055	207-889-6	
500-02-7	4-Isopropylcyclohex-2-en-1-one		11127	207-898-5	
501-52-0	3-Phenylpropionic acid	2889	32	207-924-5	
501-92-8	4-Allylphenol		11218	207-929-2	
501-94-0	2-(4-Hydroxyphenyl)ethan-1-ol		10226	207-930-8	
502-47-6	Citronellic acid	3142	616	207-939-7	
502-61-4	alpha-Farnesene		10998	207-948-6	
502-69-2	6,10,14-Trimethylpentadecan-2-one		11205	207-950-7	
503-74-2	3-Methylbutyric acid	3102	8	207-975-3	
504-85-8	4-Methylpent-3-enoic acid				
505-10-2	3-(Methylthio)propan-1-ol	3415	11554	208-004-6	
505-29-3	1,4-Dithiane			208-007-2	
505-32-8	Isophytol		10233	208-008-8	
505-57-7	2-Hexenal	2560	748	208-014-0	
505-79-3	3-(Methylthio)propyl isothiocyanate	3312	2326	208-020-3	
506-32-1	Icosa-5,8,11,14-tetraenoic acid			208-033-4	
507-09-5	Ethanethioic acid			208-063-8	
507-70-0	Borneol	2157	64	208-080-0	
508-32-7	1,1,7-Trimethyltricyclo[2.2.1.0.(2.6)]heptane			208-083-7	
512-61-8	alpha-Santalene				
513-44-0	2-Methylpropane-1-thiol		11536	208-162-6	
513-53-1	Butane-2-thiol			208-165-2	
513-85-9	Butane-2,3-diol		10181	208-173-6	
513-86-0	3-Hydroxybutan-2-one	2008	749	208-174-1	
514-99-8	Myrtanol			208-191-4	
515-00-4	Myrtenol	3439	10285	208-193-5	
515-03-7	Sclareol		10311	208-194-0	

CAS	Synonyms	Systematic name
491-35-0	Lepidine	
492-37-5		
494-90-6		4,5,6,7-Tetrahydro-3,6-dimethylbenzofuran
494-99-5	Homoveratrol; 3,4- Dimethoxytoluene	
495-40-9		
495-61-4		
495-62-5	gamma Bisabolene	6-Methyl-2-(4-methylcyclohex-3-enylidene)hept-5-ene
495-76-1		3,4-Methylenedioxybenzyl alcohol
496-77-5	Butyrolin	
497-03-0		2-Methylbut-2(trans)-enal
498-00-0		4-Hydroxy-3-methoxybenzyl alcohol
498-02-2		4-Hydroxy-3-methoxyacetophenone
498-16-8		5-Methyl-2-(1-methyleneethyl)hex-4-en-1-ol
498-36-2		
498-81-7	Dihydro-alpha-terpineol; p-Menthan-8-ol; 1-Methyl-4-isopropylcyclohexane-8-ol	
499-12-7	Aconitic acid	
499-54-7	Menthane lactone; 6- Hydroxy-3,7-dimethyloctanoic acid lactone	
499-69-4	Carvomenthol	
499-70-7	Carvomenthone; Tetrahydromenthone	
499-75-2	2-p- Cymenol; 2- Hydroxy-p-cymene	5-Isopropyl-2-methylphenol
500-02-7	Cryptone	
501-52-0	Hydrocinnamic acid	
501-92-8	p-Allylphenol	
501-94-0		
502-47-6		3,7-Dimethyloct-6-enoic acid
502-61-4		3,7,11-Trimethyldodeca-1,3,6,10-tetraene
502-69-2	Hexahydrofarnesyl acetone	
503-74-2	Isopentanoic acid; beta-Methylbutyric acid	
504-85-8		
505-10-2	Methionol	
505-29-3		
505-32-8		3,7,11,15- Tetramethylhexadec-1-en-3-ol
505-57-7		
505-79-3		
506-32-1	Arachidonic acid	
507-09-5	Thioacetic acid	
507-70-0	Camphol	1,7,7-Trimethyl-bicyclo[2.2.1]heptan-2-ol
508-32-7	Tricyclene	
512-61-8		1,7-Dimethyl-7-(4-methyl-3-pentenyl)tricyclo[2.2.1.0 (2,6)] heptane
513-44-0	Isobutyl mercaptan	
513-53-1		
513-85-9	2,3- Butylene glycol; Dimethyl ethylene glycol	
513-86-0	Acetoin; Acetyl methyl carbinol; AMC	
514-99-8		2-Hydroxymethyl-6,6-dimethyl-bicyclo[3.1.1]heptane
515-00-4		2-Hydroxymethyl-6,6-dimethyl-bicyclo[3.1.1]hept-2-ene
515-03-7	Labd-14-ene-8,13-diol	4,6,10,10-Tetramethyl-5-(3,3-dimethylpent-4-enyl)- bicyclo[4.4.0]decan-4-ol

CAS	Name	FEMA	CoE	EINECS	Comments
515-53-1	Dec-Butylmercaptan				
515-69-5	Bisabola-1,12-dien-8-ol		10178	208-205-9	
516-06-3	DL-Valine	3444		208-220-0	(1)
526-75-0	2,3-Dimethylphenol		11258	208-395-3	
528-79-0	2-Isopropyl-5-methylphenyl acetate		2308	208-442-8	
529-20-4	o-Tolualdehyde	3068	115	208-452-2	
530-56-3	4-Hydroxy-3,5-dimethoxybenzyl alcohol			208-485-2	
530-57-4	4-Hydroxy-3,5-dimethoxybenzoic acid		10111	208-486-8	
530-59-6	4-Hydroxy-3,5-dimethoxycinnamic acid			208-487-3	
531-26-0	Eugenyl benzoate	2471	636	208-504-4	
533-18-6	o-Tolyl acetate	3072	2078	208-556-8	
533-31-3	3,4-Methylenedioxyphenol			208-561-5	
534-15-6	1,1-Dimethoxyethane	3426	510	208-589-8	
534-22-5	2-Methylfuran		2209	208-594-5	
536-50-5	1-(p-Tolyl)ethan-1-ol	3139	10197	208-637-8	
536-59-4	p-Mentha-1,8-dien-7-ol	2664	2024	208-639-9	
536-60-7	4-Isopropylbenzyl alcohol	2933	88	208-640-4	
536-75-4	4-Ethylpyridine		11387	208-646-7	
536-78-7	3-Ethylpyridine	3394	11386	208-647-2	
538-65-8	Butyl cinnamate	2192	326	208-699-6	
538-86-3	Benzyl methyl ether		10910	208-705-7	
539-30-0	Benzyl ethyl ether	2144	521	208-714-6	
539-32-2	3-Butylpyridine			208-715-1	
539-82-2	Ethyl valerate	2462	465	208-726-1	
539-88-8	Ethyl 4-oxovalerate	2442	373	208-728-2	
539-90-2	Isobutyl butyrate	2187	269	208-729-8	
540-07-8	Pentyl hexanoate	2074	315	208-732-4	
540-18-1	Pentyl butyrate	2059	270	208-739-2	
540-42-1	Isobutyl propionate	2212	406	208-746-0	
540-63-6	Ethane-1,2-dithiol	3484	11467	208-752-3	
541-31-1	3-Methylbutane-1-thiol			208-774-3	
541-35-5	Butyramide			208-776-4	
541-47-9	3-Methylcrotonic acid	3187	10138	208-782-7	
541-58-2	2,4-Dimethylthiazole		11605	208-786-9	
541-85-5	5-Methylheptan-3-one			208-793-7	
541-91-3	3-Methylcyclopentadecan-1-one	3434	11135	208-795-8	
542-28-9	Pentano-1,5-lactone		10907	208-807-1	
542-46-1	Cycloheptadec-9-en-1-one	3425	11744	208-813-4	
542-55-2	Isobutyl formate	2197	502	208-818-1	
543-39-5	Myrcenol			208-843-8	
543-49-7	Heptan-2-ol	3288	554	208-844-3	
544-12-7	Hex-3-en-1-ol	2563	750	213-193-3	
544-35-4	Ethyl octadeca-9,12-dienoate		711	208-868-4	
544-40-1	Dibutyl sulfide	2215	484	208-870-5	
544-63-8	Tetradecanoic acid	2764	16	208-875-2	(1)
546-49-6	3,3,6-Trimethylhepta-1,5-dien-4-one			208-903-3	
546-79-2	Sabinene hydrate	3239	10309	208-911-7	

CAS	Synonyms	Systematic name
515-53-1		
515-69-5	alpha-Bisabolol	6-Methyl-2-(4-methylcyclohex-3-enyl)hept-5-en-2-ol
516-06-3		2-Amino-3-methylbutanoic acid
526-75-0	2,3- Xylenol	
528-79-0	Thymyl acetate; Acetyl thymol	
529-20-4		2-Methylbenzaldehyde
530-56-3	Syringic alcohol	
530-57-4	Syringic acid	
530-59-6	Sinapic acid	3-(4-Hydroxy-3,5-dimethoxyphenyl)prop-2-enoic acid
531-26-0		4-Allyl-2-methoxyphenyl benzoate
533-18-6		2-Methylphenyl acetate
533-31-3		
534-15-6	Acetaldehyde dimethyl acetal	
534-22-5		
536-50-5	p-alpha-Dimethylbenzyl alcohol; p-Tolyl methyl carbinol	1-(4-Methylphenyl)ethan-1-ol
536-59-4	Perilla alcohol; Perillyl alcohol	
536-60-7	Cuminol; p-Cymen-7-ol; Cuminyll alcohol; Cuminic alcohol	
536-75-4		
536-78-7		
538-65-8		Butyl 3-phenylprop-2-enoate
538-86-3		
539-30-0		
539-32-2		
539-82-2	Ethyl pentanoate	
539-88-8	Ethyl laevulinate; Ethyl levulinate	
539-90-2		2-Methylpropyl butanoate
540-07-8	Amyl hexanoate	
540-18-1	Amyl butyrate	
540-42-1		2-Methylpropyl propanoate
540-63-6	1,2- Dimercaptoethane	
541-31-1	Isoamyl mercaptan	
541-35-5	Butanamide	
541-47-9		3-Methylbut-2(trans)-enoic acid
541-58-2		
541-85-5		
541-91-3	Muscone; Methylexaltone	
542-28-9	1,5- Valerolactone	
542-46-1	Civetone; Civetone	
542-55-2		2-Methylpropyl formate
543-39-5		7-Methyl-3-methyleneoct-1-en-7-ol
543-49-7		
544-12-7	Leaf alcohol; beta-gamma-hexenol; cis-3-hexenol	
544-35-4	Ethyl linoleate	
544-40-1	Butyl sulfide; Di-n-butyl sulphide	
544-63-8	Myristic acid	
546-49-6		
546-79-2	Thujan-4-ol	1-Isopropyl-4-methylbicyclo[3.1.0]hexan-4-ol

CAS	Name	FEMA	CoE	EINECS	Comments
547-63-7	Methyl isobutyrate	2694	287	208-929-5	
547-64-8	Methyl-2-hydroxypropionate			208-930-0	
549-56-4	Quinine bisulfate	2975	716	208-970-9	(3)
551-08-6	3-Butylidenephthalide	3333	10083	208-991-3	
551-93-9	2-Aminoacetophenone		2041	209-002-8	
552-02-3	Viridiflorol		10322	209-003-3	
553-60-6	Isopropyl nicotinate			209-043-1	
554-12-1	Methyl propionate	2742	415	209-060-4	
554-14-3	2-Methylthiophene		11631	209-063-0	
555-10-2	beta-Phellandrene		11017	209-081-9	
556-24-1	Methyl isovalerate	2753	457	209-117-3	
556-82-1	3-Methylbut-2-en-1-ol	3647	11795	209-141-4	
557-00-6	Propyl isovalerate	2960	443	209-148-2	
557-31-3	Allyl ethyl ether			209-169-7	
557-48-2	Nona-2(trans),6(cis)-dienal	3377	659	209-178-6	
562-74-3	4-Terpinenol	2248	2229	209-235-5	
563-80-4	3-Methylbutan-2-one		11131	209-264-3	
564-20-5	Sclareolide	3794		209-269-0	
564-94-3	Myrtenal	3395	10379	209-274-8	
565-60-6	3-Methylpentan-2-ol		10276	209-281-6	
565-61-7	3-Methylpentan-2-one		11157	209-282-1	
576-15-8	1-Acetylnidole			209-396-1	
576-26-1	2,6-Dimethylphenol	3249	11261	209-400-1	
578-58-5	1-Methoxy-2-methylbenzene	2680	187	209-426-3	
579-07-7	1-Phenylpropan-1,2-dione	3226	2275	209-435-2	
579-94-2	2-Isopropyl-5-methylcyclohexyl ethoxyacetate			209-448-3	
583-33-5	Butyl 2-furoate				
583-58-4	3,4-Dimethylpyridine			209-511-5	
583-60-8	2-Methylcyclohexanone			209-513-6	
583-61-9	2,3-Dimethylpyridine			209-514-1	
583-92-6	4-(Methylthio)-2-oxobutyric acid				
584-02-1	Pentan-3-ol		2349	209-526-7	
585-24-0	Isobutyl lactate		10709	209-551-3	
586-38-9	3-Methoxybenzoic acid			209-574-9	
586-62-9	Terpinolene	3046	2115	209-578-0	
586-82-3	1-Terpinenol	3563	10252	209-585-9	
588-67-0	Benzyl butyl ether	2139	520	209-626-0	
589-34-4	3-Methylhexane			209-643-3	
589-35-5	3-Methylpentan-1-ol	3762	10275	209-644-9	
589-38-8	Hexan-3-one	3290	11097	209-645-4	
589-40-2	sec-Butyl formate		10532		
589-43-5	2,4-Dimethylhexane			209-649-6	
589-55-9	Heptan-4-ol		555	209-651-7	
589-59-3	Isobutyl isovalerate	3369	568	209-653-8	
589-66-2	Isobutyl crotonate	3432	10706	209-658-5	
589-75-3	Butyl octanoate		742	209-659-0	
589-82-2	Heptan-3-ol	3547	544	209-661-1	

CAS	Synonyms	Systematic name
547-63-7		Methyl2-methylpropanoate
547-64-8		
549-56-4		
551-08-6		
551-93-9		
552-02-3		2,6,6,9-tetramethyl-tricyclo[6.3.0.0(5.7)]undecan-2-ol
553-60-6		Isopropyl 3-pyridinecarboxylate
554-12-1	Methyl propanoate	
554-14-3		
555-10-2		p-Mentha-1(7),2-diene
556-24-1		Methyl3-methylbutanoate
556-82-1	Prenol	
557-00-6	Propyl 3-methylbutyrate	
557-31-3		
557-48-2	2,6-Nonadienal; Cucumber aldehyde	
562-74-3	4- Carvomethenol; 1-Methyl-4-isopropylcyclohex-1-en-4-ol	p- Menth-1-en-4-ol
563-80-4	3- Methyl-1-butenol-2; Methyl isopropyl ketone	
564-20-5	Norambrienolide; Decahydro-tetramethylnaphtho-furanone	3a,6,6,9a-Tetramethyldecahydronaptho(2,1b) furan-1-one
564-94-3	Pin-2-en-10-al	2-Formyl-6,6-dimethyl-bicyclo[3.1.1]hept-2-ene
565-60-6		
565-61-7		
576-15-8	N-Acetylnidole	
576-26-1	2,6- Xylenol	
578-58-5	o-Methylanisole; o-Cresyl methyl ether; 2-Methoxy toluene	
579-07-7		
579-94-2	Coryfin B	
583-33-5		
583-58-4		
583-60-8		
583-61-9		
583-92-6		
584-02-1		
585-24-0		2-Methylpropyl 2-hydroxypropanoate
586-38-9		
586-62-9		p-Mentha-1,4(8)-diene
586-82-3		p-Menth-3-en-1-ol
588-67-0		
589-34-4		
589-35-5		
589-38-8	Ethyl propyl ketone	
589-40-2	But-2-yl formate	1-Methylpropyl formate
589-43-5		
589-55-9		
589-59-3		2-Methylpropyl 3-methylbutanoate
589-66-2		2-Methylpropyl but-2(trans)-enoate
589-75-3	Butyl caprylate	
589-82-2		

CAS	Name	FEMA	CoE	EINECS	Comments
589-98-0	Octan-3-ol	3581	11715	209-667-4	
590-01-2	Butyl propionate	2211	405	209-669-5	
590-36-3	2-Methylpentan-2-ol		10274	209-681-0	
590-73-8	2,2-Dimethylhexane			209-689-4	
590-86-3	3-Methylbutanal	2692	94	209-691-5	
590-90-9	4-Hydroxybutan-2-one		11103	209-693-6	
591-12-8	5-Methylfuran-2(3H)-one	3293	731	209-701-8	
591-22-0	3,5-Dimethylpyridine		11382	209-708-6	
591-24-2	3-Methylcyclohexanone			209-710-7	
591-31-1	3-Methoxybenzaldehyde		10351	209-712-8	
591-60-6	Butyl acetoacetate	2176	241	209-722-2	
591-63-9	Butyl but-2-enoate				
591-68-4	Butyl valerate	2217	466	209-728-5	
591-78-6	Hexan-2-one		11776	209-731-1	
591-80-0	Pent-4-enoic acid	2843	2004	209-732-7	
591-87-7	Allyl acetate		11730	209-734-8	
592-20-1	2-Oxopropyl acetate		607	209-746-3	
592-82-5	Butyl isothiocyanate		11488	209-770-4	
592-84-7	Butyl formate	2196	501	209-772-5	
592-88-1	Diallyl sulfide	2042	11846	209-775-1	
593-08-8	Tridecan-2-one	3388	11194	209-784-0	
593-81-7	Trimethylamine hydrochloride			209-810-0	
595-39-1	Isovaline				(1)
598-32-3	But-3-en-2-ol			209-929-8	
598-75-4	3-Methylbutan-2-ol	3703		209-950-2	
598-82-3	Lactic acid	2611	4	209-954-4	(1)
598-98-1	Methyl 2,2-dimethylpropionate		10790	209-959-1	
600-14-6	Pentan-2,3-dione	2841	2039	209-984-8	
600-18-0	2-Oxobutyric acid	3723		209-986-9	
600-22-6	Methyl 2-oxopropionate		10848	209-987-4	
606-45-1	Methyl 2-methoxybenzoate	2717	2192	210-118-6	
607-97-6	Ethyl-2-acetylbutyrate				
611-13-2	Methyl 2-furoate	2703	358	210-254-6	
613-70-7	2-Methoxyphenyl acetate	3687	552	210-350-8	
614-18-6	Ethyl nicotinate			210-370-7	
614-33-5	Glyceryl tribenzoate	3398	10656	210-379-6	(4)
614-99-3	Ethyl 2-furoate		10588	210-404-0	
615-10-1	Propyl 2-furoate	2946	359	210-407-7	
616-09-1	Propyl lactate			210-464-8	
616-25-1	Pent-1-en-3-ol	3584	11717	210-472-1	
616-44-4	3-Methylthiophene		11632	210-482-6	
617-01-6	o-Tolyl salicylate	3734		210-500-2	
617-05-0	Ethyl vanillate		2302	210-503-9	
617-29-8	2-Methylhexan-3-ol		10266	210-508-6	
617-35-6	Ethyl pyruvate	2457	430	210-511-2	
617-50-5	Isopropyl isobutyrate	2937	290	210-517-5	

CAS	Synonyms	Systematic name
589-98-0	Ethyl n-amyl carbinol; amylethylcarbinol; d-n-octanol	
590-01-2		
590-36-3		
590-73-8		
590-86-3	Isovaleraldehyde; 3- Methylbutyraldehyde	
590-90-9		
591-12-8	4- Hydroxy-3-pentenoic acid lactone;pent-3-en-1,4-lactone; alpha-Angelica lactone; beta-gamma-Angelica lactone	
591-22-0		
591-24-2		
591-31-1		
591-60-6		Butyl3-oxobutanoate
591-63-9		
591-68-4	Butyl pentanoate	
591-78-6		
591-80-0	Allyl acetic acid	
591-87-7		
592-20-1	Acetonyl acetate	
592-82-5	4-isothiocyanato-but-1-ene	
592-84-7		
592-88-1	Allyl sulfide	
593-08-8		
593-81-7		
595-39-1		2-Amino-2-methylbutanoic acid
598-32-3		
598-75-4	Methyl isopropyl carbinol	
598-82-3		2-Hydroxypropanoic acid
598-98-1	Methyl pivalate	
600-14-6	Acetyl propionyl	
600-18-0		
600-22-6	Methyl pyruvate	
606-45-1	o-methoxybenzoic acid methyl ester	
607-97-6		
611-13-2	Methyl furoate; Methyl pyromucate; Furan-alpha-carboxylic acid, methyl ester	
613-70-7	Guaiacyl acetate	
614-18-6		Ethyl 3-pyridine carboxylate
614-33-5		Propanetri-1,2,3-yl tribenzoate
614-99-3		
615-10-1	n-Propyl pyromucate	
616-09-1		Propyl 2-hydroxypropanoate
616-25-1		
616-44-4		
617-01-6		2-Hydroxy-2-methylphenylbenzoate
617-05-0		Ethyl 4-hydroxy-3-methoxybenzoate
617-29-8		
617-35-6		Ethyl 2-oxopropanoate
617-50-5		Isopropyl 2-methylpropanoate

CAS	Name	FEMA	CoE	EINECS	Comments
617-94-7	2-Phenylpropan-2-ol		11704	210-539-5	
618-45-1	3-Isopropylphenol			210-551-0	
619-01-2	Dihydrocarveol	2379	2025	210-575-1	
620-02-0	5-Methylfurfural	2702	119	210-622-6	
620-17-7	3-Ethylphenol		549	210-627-3	
620-23-5	m-Tolualdehyde	3068	115	210-632-0	
620-79-1	Ethyl 2-acetyl-3-phenylpropionate	2416	2241	210-651-4	
621-82-9	Cinnamic acid	2288	22	210-708-3	(1)
622-45-7	Cyclohexyl acetate	2349	217	210-736-6	
622-62-8	4-Ethoxyphenol	3695	2258	210-748-1	
622-78-6	Benzyl isothiocyanate		11863	210-753-9	
623-05-2	4-Hydroxybenzyl alcohol			210-768-0	
623-15-4	4-(2-Furyl)but-3-en-2-one	2495	11838	210-774-3	
623-17-6	Furfuryl acetate	2490	2065	210-775-9	
623-18-7	Methyl furfuracrylate		2267		
623-19-8	Furfuryl propionate	3346	10646	210-776-4	
623-20-1	Ethyl furfuracrylate		545	210-778-5	
623-21-2	Furfuryl butyrate		638	210-779-0	
623-22-3	Propyl 3-(2-furyl)acrylate	2945	11842	210-780-6	
623-30-3	3-(2-Furyl)acrylaldehyde	2494	2252	210-785-3	
623-36-9	2-Methylpent-2-enal	3194	2129	210-789-5	
623-37-0	Hexan-3-ol	3351	11775	210-790-0	
623-42-7	Methyl butyrate	2693	263	210-792-1	
623-43-8	Methyl crotonate			210-793-7	
623-51-8	Ethyl 2-mercaptoacetate			210-800-3	
623-70-1	Ethyl trans-2-butenolate	3486	2244	210-808-7	
623-91-6	Diethyl fumarate			210-819-7	
624-09-9	Heptyl heptanoate		10665	210-828-6	
624-13-5	Propyl octanoate		10892	210-830-7	
624-17-9	Diethyl nonanedioate		10549	210-833-3	
624-24-8	Methyl valerate	2752	588	210-838-0	
624-41-9	2-Methylbutyl acetate	3644	10762	210-843-8	
624-42-0	6-Methylheptan-3-one		2143	210-844-3	
624-51-1	Nonan-3-ol		10290	210-850-6	
624-54-4	Pentyl propionate		416	210-852-7	
624-89-5	Methyl ethyl sulfide		11474	210-868-4	
624-92-0	Dimethyl disulfide	3536	2175	210-871-0	
625-33-2	Pent-3-en-2-one	3417	666	210-888-3	
625-55-8	Isopropyl formate	2944	503	210-901-2	
625-60-5	S-Ethyl acetothioate	3282	11665	210-904-9	
625-80-9	Di-isopropyl sulfide		542	210-911-7	
625-84-3	2,5-Dimethylpyrrole		11383	210-913-8	
625-86-5	2,5-Dimethylfuran		2208	210-914-3	
626-38-0	1-Methylbutyl acetate		10761	210-946-8	
626-67-5	1-Methylpiperidine			210-959-9	
626-77-7	Propyl hexanoate	2949	311	210-963-0	
626-82-4	Butyl hexanoate	2201	313	210-964-6	

CAS	Synonyms	Systematic name
617-94-7	Dimethyl phenyl carbinol	
618-45-1		
619-01-2		p-Menth-8-en-2-ol
620-02-0		5 Methyl-2-furaldehyde
620-17-7		
620-23-5		3-Methylbenzaldehyde
620-79-1	Ethyl 2-Benzylacetoacetate	
621-82-9	tert-beta- Phenylacrylic acid; 3- phenyl-2-propenoic acid	3-Phenylprop-2-enoic acid
622-45-7		
622-62-8	Hydroquinone monoethyl ether	
622-78-6	2- Isothiocyanatotoluene	
623-05-2		
623-15-4	Furfurylidine acetone	
623-17-6		
623-18-7		Methyl 3-(2-furyl)prop-2-enoate
623-19-8		
623-20-1		Ethyl 3-(2-furyl)prop-2-enoate
623-21-2		
623-22-3	Propyl 2-furanacrylate	Propyl 3(2-furyl)prop-2-enoate
623-30-3	Furyl acrolein	3-(2-Furyl)prop-2-enal
623-36-9	alpha-Methyl-beta-ethyl acrolein	
623-37-0		
623-42-7		
623-43-8		Methyl but-2(trans)-enoate
623-51-8		
623-70-1		
623-91-6		Diethyl but-2(trans)-enedioate
624-09-9	Oenanthic ether	
624-13-5	Propyl caprylate	
624-17-9	Diethyl azelate	
624-24-8	Methyl pentanoate	
624-41-9		
624-42-0	Isoamyl ethyl ketone	
624-51-1		
624-54-4	Amyl propionate	
624-89-5		
624-92-0	Methyl disulfide	
625-33-2		
625-55-8		
625-60-5	Ethyl thioacetate; Acetic acid thio ethyl	
625-80-9		
625-84-3		
625-86-5		
626-38-0	Pent-2-yl acetate	
626-67-5		
626-77-7	Propyl caproate	
626-82-4	Butyl caproate	

CAS	Name	FEMA	CoE	EINECS	Comments
626-89-1	4-Methylpentan-1-ol		10278	210-969-3	
626-93-7	Hexan-2-ol		11774	210-971-4	
627-90-7	Ethyl undecanoate	3492	10633	211-018-5	
628-29-5	Methyl butyl sulfide			211-034-2	
628-44-4	2-Methyloctan-1-ol			211-044-7	
628-46-6	5-Methylhexanoic acid	3572	10142		
628-63-7	Pentyl acetate		211	211-047-3	
628-67-1	4-Acetoxybutyl acetate				
628-97-7	Ethyl hexadecanoate	2451	634	211-064-6	
628-99-9	Nonan-2-ol	3315	11803	211-065-1	
629-19-6	Dipropyl disulfide	3228	540	211-079-8	
629-33-4	Hexyl formate	2570	499	211-087-1	
629-45-8	Dibutyl disulfide			211-091-3	
629-59-4	Tetradecane			211-096-0	
629-62-9	Pentadecane			211-098-1	
629-70-9	Hexadec-1-yl acetate			211-103-7	
629-76-5	Pentadecan-1-ol			211-107-9	
629-80-1	Hexadecanal		10336	211-111-0	
632-15-5	3,4-Dimethylthiophene		11610		
634-36-6	1,2,3-Trimethoxybenzene			211-207-2	
637-64-9	Tetrahydrofurfuryl acetate	3055	2069	211-296-8	
637-65-0	Tetrahydrofurfuryl propionate	3057	11841		
637-78-5	Isopropyl propionate	2959	404	211-300-8	
638-02-8	2,5-Dimethylthiophene		11609	211-313-9	
638-10-8	Ethyl 3-methylcrotonate		10610	211-319-1	
638-11-9	Isopropyl butyrate	2935	267	211-320-7	
638-25-5	Pentyl octanoate	2079	393	211-328-0	
638-33-5	2-Methylbutyl lactate		10769		
638-46-0	Ethyl butyl sulfide				
638-49-3	Pentyl formate	2068	497	211-340-6	
639-99-6	Elemol		10205	211-360-5	
644-08-6	4-Methyl-1,1'-biphenyl	3186	2292	211-409-0	
644-35-9	2-Propylphenol	3522	11908	211-415-3	
644-49-5	Propyl isobutyrate	2936	289	211-417-4	
644-98-4	2-Isopropylpyridine		11400	211-426-3	
645-13-6	4-Isopropylacetophenone	2927	651	211-433-1	
645-56-7	4-Propylphenol	3649		211-446-2	
646-01-5	3-(Methylthio)propionic acid			211-460-9	
646-07-1	4-Methylvaleric acid	3463	10150	211-464-0	
646-13-9	Isobutyl octadecanoate			211-466-1	
656-53-1	4-Methyl-5-(2-acetoxyethyl)thiazole	3205	11620	211-515-7	
657-27-2	l-Lysine monochlorhydrate				(1)
659-70-1	3-Methylbutyl 3-methylbutyrate	2085	458	211-536-1	
673-84-7	2,6-Dimethylocta-2,4,6-triene			211-614-5	
688-82-4	1,1-Diethoxyheptane		553	211-707-0	
689-67-8	6,10-Dimethyl-5,9-undecadien-2-one			211-711-2	
689-89-4	Methyl hexa-2,4-dienoate	3714		211-712-8	

CAS	Synonyms	Systematic name
626-89-1		
626-93-7		
627-90-7		
628-29-5		
628-44-4		
628-46-6		
628-63-7	Amyl acetate	
628-67-1		
628-97-7	Ethyl palmitate	
628-99-9		
629-19-6	Propyl disulfide	
629-33-4	n-Hexyl formate	
629-45-8		
629-59-4		
629-62-9		
629-70-9	Cetyl acetate	
629-76-5		
629-80-1		
632-15-5		
634-36-6		
637-64-9		
637-65-0		
637-78-5		
638-02-8		
638-10-8	Ethyl senecioate	Ethyl 3-methylbut-2(trans)-enoate
638-11-9		
638-25-5	Amyl octanoate	
638-33-5		2-Methylbutyl 2-hydroxypropanoate
638-46-0		
638-49-3	Amyl formate	
639-99-6		2-(4-Methyl-3-isopropylene-4-vinylcyclohexyl)propan-2-ol
644-08-6	p-Methyldiphenyl	
644-35-9		
644-49-5		Propyl 2-methylpropanoate
644-98-4		
645-13-6		
645-56-7		
646-01-5		
646-07-1	4-methylpentanoic acid; Isohexanoic acid; Isocaproic acid	
646-13-9	Isobutyl stearate	2-Methylpropyl octadecanoate
656-53-1	4-Methyl-5-thiazoleethanol acetate	
657-27-2		
659-70-1	Isoamyl isopentanoate; Isopentyl isopentanoate	
673-84-7	allo Ocimene	
688-82-4	Heptanal diethyl acetal	
689-67-8		
689-89-4	Methyl sorbate	

CAS	Name	FEMA	CoE	EINECS	Comments
692-86-4	Ethyl undec-10-enoate	2461	10634	211-734-8	
693-54-9	Decan-2-one		11055	211-752-6	
693-95-8	4-Methylthiazole	3716	11627	211-764-1	
695-06-7	Hexano-1,4-lactone	2556	2254	211-778-8	
696-30-0	4-Isopropylpyridine			211-794-5	
698-10-2	5-Ethyl-3-hydroxy-4-methylfuran-2(5H)-one	3153	2300	211-811-6	
698-27-1	2-Hydroxy-4-methylbenzaldehyde	3697	2130	211-813-7	
698-76-0	Octano-1,5-lactone	3214	2195	211-820-5	
699-10-5	Benzyl methyl disulfide	3504	11508	211-826-8	
699-17-2	1-(2-Furyl)butan-3-one		11084	211-831-5	
705-73-7	1-Phenylpentan-2-ol	2953	83	211-887-0	
705-86-2	Decano-1,5-lactone	2361	621	211-889-1	
706-14-9	Decano-1,4-lactone	2360	2230	211-892-8	
710-04-3	Undecano-1,5-lactone	3294	688	211-915-1	
713-95-1	Dodecano-1,5-lactone	2401	624	211-932-4	
730-46-1	Hexadecano-1,4-lactone		10673		
759-05-7	3-Methyl-2-oxobutyric acid		2262	212-065-4	
762-29-8	6,10,14-Trimethylpentadeca-5,9,13-trien-2-one	3442	11206	212-097-9	
763-32-6	3-Methylbut-3-en-1-ol		10260	212-110-8	
764-37-4	Pent-3-en-1-ol		10298	212-118-1	
764-39-6	Pent-2-enal	3218	10375	212-120-2	
764-40-9	Penta-2,4-dienal	3217	11695		
765-70-8	3-Methyl-1,2-cyclopentanedione	2700	758	212-154-8	
766-92-7	Benzyl methyl sulfide	3597		212-174-7	
770-27-4	Furfurylidene-2-butanal	2492	11885	212-221-1	
774-48-1	(Diethoxymethyl)benzene		517	212-265-1	
774-64-1	3,4-Dimethyl-5-pentylidene-furan-2(5H)-one		11873		
814-67-5	Propane-1,2-dithiol	3520	11564	212-398-5	
815-57-6	3-Methylpentane-2,4-dione			212-420-3	
816-66-0	4-Methyl-2-oxovaleric acid		2263	212-435-5	
818-04-2	Di-isopentyl succinate		10555	212-448-6	
818-38-2	Diethyl pentanedioate			212-451-2	
819-97-6	sec-Butyl butyrate		10528	212-465-9	
820-00-8	2-Butyl hexanoate		10533		
821-09-0	Pent-4-en-1-ol			212-473-2	
821-55-6	2-Nonan-2-one	2785	154	212-480-0	
823-22-3	Hexano-1,5-lactone	3167	641	212-511-8	
828-26-2	Trithioacetone	3475	2334	212-582-5	
868-57-5	Methyl 2-methylbutyrate	2719	2085	212-778-0	
870-23-5	Allylthiol	2035	476	212-792-7	
871-22-7	1,1-Dibutoxyethane		2341	212-804-0	
872-10-6	Dipentyl sulfide			212-820-8	
872-55-9	2-Ethylthiophene		11614	212-830-2	
873-64-3	4,5-Dimethyl-2-ethylthiazole				
873-94-9	3,3,5-Trimethylcyclohexan-1-one			212-855-9	

CAS	Synonyms	Systematic name
692-86-4	Ethylundecylenate	
693-54-9		
693-95-8		
695-06-7	gamma-Hexalactone; Hexanolide-1,4; gamma-ethyl-n-butyrolactone; tonkalide	
696-30-0		
698-10-2	2,4- Dihydroxy-3-methylhex-2-enoic acid lactone; emoxyfurone	
698-27-1		
698-76-0	delta-Octalactone; 5-Hydroxyoctanoic acid lactone	
699-10-5		
699-17-2	4-(2- Furyl) butan-2-one	
705-73-7	alpha-Propylphenethyl alcohol; Benzyl propyl carbinol	
705-86-2	delta-Decalactone; Decanolide-1,5; Amyl-delta-valerolactone	
706-14-9	gamma-Decalactone; gamma-n-Decalactone; Decanolide-1,4; gamma-n-hexyl-gamma-butyrolactone	
710-04-3	5- Hydroxyundecanoic acid lactone; delta-Undecalactone; Undecanolide-1,5; alpha-n-hexyl-delta-valerolactone	
713-95-1	delta-Dodecalactone; n-Heptyl-delta-valerolactone; 5-Hydroxydodecanoic acid delta-lactone	
730-46-1		
759-05-7		
762-29-8	Farnesyl acetone	
763-32-6		
764-37-4		
764-39-6		
764-40-9		
765-70-8		
766-92-7		
770-27-4	Furfurylidene-2-butyraldehyde	
774-48-1	Benzaldehyde diethyl acetal	
774-64-1	Bovolide; 4- Hydroxy-2,3-dimethylnona-2,4-dienoic acid lactone	
814-67-5		
815-57-6		
816-66-0	4- Methyl-2-oxopentanoic acid	
818-04-2	Di-isoamyl succinate; Di(3-methylbutyl) succinate	Di-(3-Methylbutyl)butanedioate
818-38-2		
819-97-6	But-2-yl butyrate	1-Methylpropyl butanoate
820-00-8		
821-09-0		
821-55-6	Methyl heptyl ketone	
823-22-3	delta-Hexalactone	
828-26-2		2,2,4,4,6,6-Hexamethyl-1,3,5-trithiane
868-57-5		
870-23-5	2-propene-1-thiol	
871-22-7	Acetaldehyde dibutyl acetal	
872-10-6		
872-55-9		
873-64-3		
873-94-9		

CAS	Name	FEMA	CoE	EINECS	Comments
874-66-8	3-(2-Furyl)-2-methylprop-2-enal	2704	11878	212-866-9	
880-36-4	2-Octylthiophene			212-913-3	
881-68-5	Vanillyl acetate	3108	225	212-920-1	
882-33-7	Diphenyl disulfide	3225	11757	212-926-4	
924-50-5	Methyl 3-methylbut-2-enoate			213-107-4	
925-54-2	2-Methylhexanal			213-118-4	
925-78-0	Nonan-3-one	3440	11160	213-125-2	
928-68-7	6-Methylheptan-2-one		11146	213-179-7	
928-80-3	Decan-3-one		11056	213-183-9	
928-83-2	trans-2-Hexenol				
928-91-6	Hex-4(cis)-en-1-ol			213-187-0	
928-92-7	Hex-4(trans)-en-1-ol			213-188-6	
928-94-9	Hex-2(cis)-en-1-ol	2562	69	213-190-7	
928-95-0	Hex-2(trans)-en-1-ol	2562	69	213-191-2	
928-96-1	Hex-3(cis)-en-1-ol	2563	750	213-192-8	
928-97-2	Hex-3(trans)-en-1-ol	2563	750	213-193-3	
929-22-6	trans-4-Heptenal		2125	213-198-0	
932-16-1	2-Acetyl-1-methylpyrrole	3184	11373	213-247-6	
939-21-9	3-Phenylpent-4-enal	3318	10378	213-356-9	
939-48-0	Isopropyl benzoate	2932	652	213-361-6	
941-98-0	alpha-Methyl naphthyl ketone				
999-40-6	Neryl butyrate	2774	505	213-660-1	
1003-04-9	4,5-Dihydrothiophen-3(2H)-one	3266	2337	213-698-9	
1003-29-8	Pyrrole-2-carbaldehyde		11393	213-705-5	
1003-38-9	2,5-Dimethyltetrahydrofuran			213-707-6	
1004-29-1	2-Butyltetrahydrofuran			213-718-6	
1009-62-7	2,2-Dimethyl-3-phenylpropionaldehyde		598	213-771-5	
1072-83-9	2-Acetylpyrrole	3202	11721	214-016-2	
1073-26-3	2-Propionylpyrrole	3614	11942	214-026-7	
1073-29-6	2-(Methylthio)phenol	3210	11553	214-027-2	
1076-56-8	1-Isopropyl-2-methoxy-4-methylbenzene	3436	11245	214-063-9	
1079-01-2	Myrtenyl acetate	3765	10887	214-088-5	
1080-12-2	Vanillylidene acetone	3738	691	214-096-9	
1113-21-9	Geranyl linalool			214-201-8	
1113-60-6	3-Hydroxy-2-oxopropionic acid				
1115-84-0	S-Methylmethioninesulphonium chloride	3445	761	214-231-1	
1117-55-1	Hexyl octanoate	2575	394	214-247-9	
1117-59-5	Hexyl valerate		10696	214-248-4	
1117-65-3	Ethyl oct-3-enoate		10618		
1118-27-0	Linalyl isovalerate	2646	449	214-259-4	
1118-39-4	Myrcenyl acetate		10857	214-262-0	
1119-16-0	4-Methylpentanal		10369	214-273-0	
1119-44-4	Hept-3-en-2-one	3400	11094	214-278-8	
1122-54-9	4-Acetylpyridine			214-350-9	
1122-62-9	2-Acetylpyridine	3251	2315	214-355-6	
1123-85-9	2-Phenylpropan-1-ol	2732	2257	214-379-7	

CAS	Synonyms	Systematic name
874-66-8	2- Furfurylidenepropionaldehyde; 2-Methyl-3-furylacrolein; 3- (2-furyl)methacrylaldehyde	
880-36-4		
881-68-5	Acetyl vanillin	4-Acetoxy-3-methoxybenzaldehyde
882-33-7	Phenyl disulfide	
924-50-5	Methyl senecioate	
925-54-2		
925-78-0	Ethyl hexyl ketone	
928-68-7		
928-80-3		
928-83-2		
928-91-6		
928-92-7		
928-94-9	2- Hexenol	
928-95-0	2- Hexenol	
928-96-1	Leaf alcohol; beta-gamma-hexenol; cis-3-hexenol	
928-97-2	Leaf alcohol; beta-gamma-hexenol; cis-3-hexenol	
929-22-6		
932-16-1		
939-21-9	beta-Vinylhydrocinnamaldehyde	
939-48-0		
941-98-0	Naphthyl methyl ketone, 1-acetonaphthone	
999-40-6		3,7-Dimethyl-2(cis),6-octadienyl butanoate
1003-04-9		
1003-29-8	2- Formylpyrrole	
1003-38-9		
1004-29-1		
1009-62-7	3-Phenylpropyl dimethyl aldehyde	
1072-83-9	Methyl-2-pyrrolyl ketone	
1073-26-3		
1073-29-6		
1076-56-8	Thymol methyl ether; 3- Methoxy-p-cymene	
1079-01-2	2-Pinen-10-ol acetate	(6,6-Dimethylbicyclo[3.3.1]hept-2-en-2-yl)methyl acetate
1080-12-2		4-(4-Hydroxy-3-methoxyphenyl)but-3-en-2-one
1113-21-9		3,7,11,15- Tetramethylhexadeca-1,6,10,14-tetraen-3-ol
1113-60-6		
1115-84-0	Vitamin U; DL-(3-Amino-3-carboxypropyl)dimethylsulphonium chloride	
1117-55-1	Hexyl caprylate	
1117-59-5	Hexyl pentanoate	
1117-65-3		
1118-27-0	Linalyl 3-methylbutyrate	1,5-Dimethyl-1-vinylhex-4-enyl 3-methylbutanoate
1118-39-4		7-Methyl-3-methyleneoct-1-en-7-yl acetate
1119-16-0	4- Methylvaleraldehyde	
1119-44-4		
1122-54-9		
1122-62-9	Methyl-2-pyridyl ketone	
1123-85-9	Hydratropic alcohol; Hydratropyl alcohol; 2-Phenylpropan-1-ol; beta-Methylphenethyl alcohol	

CAS	Name	FEMA	CoE	EINECS	Comments
1124-11-4	2,3,5,6-Tetramethylpyrazine	3237	734	214-391-2	
1125-21-9	2,6,6-Trimethylcyclohex-2-en-1,4-dione	3421	11200	214-406-2	
1125-88-8	alpha,alpha-Dimethoxytoluene	2128	37	214-413-0	
1128-08-1	3-Methyl-2-pentylcyclopent-2-en-1-one	3763		214-434-5	
1129-47-1	Cyclohexyl isobutyrate		10548	214-448-1	
1129-69-7	2-Hexylpyridine			214-454-4	
1135-24-6	4-Hydroxy-3-methoxycinnamic acid		10113	214-490-0	
1135-66-6	Isolongifolene			214-494-2	
1139-30-6	beta-Caryophyllene epoxide		10500	214-519-7	
1142-85-4	Terpinyl isovalerate	3054	456		
1142-85-5	Methyl-1-(4-methylcyclohexenyl)ethyl 3-methylbutanoate	3054	456		
1184-78-7	Trimethylamine oxide		10494	214-675-6	
1188-02-9	2-Methylheptanoic acid	2706	2003	214-704-2	
1189-09-9	Methyl geranate		10797	214-712-6	
1191-03-3	Methyl deca-4,8-dienoate		10782		
1191-04-4	2-Hexenoic acid	3169	11777	214-727-8	
1191-08-8	Butane-1,4-dithiol			214-728-3	
1191-16-8	Prenyl acetate		11796	214-730-4	
1191-41-9	Ethyl octadeca-9,12,15-trienoate		712	214-734-6	
1191-43-1	Hexane-1,6-dithiol	3495	11486	214-735-1	
1191-62-4	Octane-1,8-dithiol	3514	2331	214-738-8	
1192-62-7	2-Acetylfuran	3163	11653	214-757-1	
1193-11-9	2,2,4-Trimethyl-1,3-dioxolane	3441	11423	214-766-0	
1193-18-6	3-Methylcyclohex-2-en-1-one	3360	11134	214-769-7	
1193-79-9	2-Acetyl-5-methylfuran	3609	11038	214-779-1	
1195-09-1	5-Methylguaiaicol		11243	214-791-7	
1195-32-0	1-Isopropenyl-4-methylbenzene	3144	2260	214-795-9	
1195-79-5	Fenchone	2479	551	225-160-0	
1197-01-9	2-(4-Methylphenyl)propan-2-ol	3242	530	214-817-7	
1200-67-5	Isobornyl formate	2162	565	214-853-3	
1205-42-1	cis-2-Methyl-5-(1-methylethenyl)-2-cyclohexen-1-ylacetate			214-883-7	
1211-29-6	Methyl 3-oxo-2-pent-2-enyl-1-cyclopentylacetate	3410	10821	214-918-6	
1319-88-6	5-Hydroxy-2-phenyl-1,3-dioxane	2129	36	215-294-8	
1321-30-8	Ethyl aconitate	2417	11845		
1321-89-7	2,6-Dimethyloctanal	112	2390		
1322-17-4	Nonan-1,3-diyl diacetate	2783	2075	215-332-3	
1323-00-8	Santalyl acetate	3007	224		(4)
1323-75-7	Santalyl phenylacetate	3008	239		(4)
1333-09-1	Tolualdehyde glyceryl acetal	3067	46		
1333-58-0	(1-Methylethyl)quinoline			215-598-0	
1334-78-7	Tolualdehyde	3068	115	215-615-1	
1334-82-3	Pentyl 2-furoate	2072	2109	215-616-7	

CAS	Synonyms	Systematic name
1124-11-4		
1125-21-9	3,5,5- Trimethylcyclohex-2-ene-1,4-dione	
1125-88-8	Benzaldehyde dimethyl acetal	
1128-08-1	Dihydrojasnone; 2-Pentyl-3-methyl-2-cyclopenten-1-one; 3-Methyl-2-(n-pentanyl)-2-cyclopentene-1-one	
1129-47-1		Cyclohexyl 2-methylpropanoate
1129-69-7		
1135-24-6	Ferulic acid	3-(4-Hydroxy-3-methoxyphenyl)prop-2-enoic acid
1135-66-6		2,2,7,7-Tetramethyltricyclo[6.2.1(1,8).0(1,6)]undec-5-ene
1139-30-6	beta-Caryophyllene oxide	4,5-Epoxy-4,12,12-trimethyl-8-methylene-bicyclo[8.2.0]dodecane
1142-85-4		p-Menth-1-en-8-yl 3-methylbutanoate
1142-85-5		
1184-78-7		
1188-02-9		
1189-09-9		Methyl 3,7-dimethyl-2(trans),6-octadienoate
1191-03-3		
1191-04-4		
1191-08-8		
1191-16-8		3-Methylbut-2-enyl acetate
1191-41-9	Ethyl linolenate	
1191-43-1	Hexamethylene dimercaptan	
1191-62-4		
1192-62-7	2- Furyl methyl ketone	
1193-11-9		
1193-18-6	1- Methyl-1-cyclohexenone-3	
1193-79-9		
1195-09-1	1- Hydroxy-2-methoxy-5-methylbenzene	2-Methoxy-5-methylphenol
1195-32-0	4,alpha-Dimethylstyrene	
1195-79-5		
1197-01-9	p-Cymen-8-ol; p-alpha-alpha-Trimethylbenzyl alcohol	
1200-67-5		1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl formate
1205-42-1		
1211-29-6	Methyl jasmonate	
1319-88-6	Benzaldehyde glyceryl acetal	
1321-30-8	Triethyl aconitate	Triethyl propene-1,2,3-tricarboxylate
1321-89-7		
1322-17-4	1,3-Nonanediol diacetate (mixed esters); Acetoxy nonyl acetate (mixed esters); jasmony	
1323-00-8		
1323-75-7		
1333-09-1	Tolylaldehyde glyceryl acetal	2-(2,3 and 4-Methylphenyl)-5-hydroxy-1,3-dioxane and 2-(2,3 and 4-Methylphenyl)-5-hydroxymethyl-1,3-dioxolane (mixture)
1333-58-0		
1334-78-7		2-,3- and 4-Methylbenzaldehyde
1334-82-3	Amyl 2-furoate	

CAS	Name	FEMA	CoE	EINECS	Comments
1335-46-2	Methyl ionone			215-635-0	
1335-66-6	Isocyclocitral			215-638-7	
1365-19-1	Linalool oxide (5-ring)	3746	11876		
1438-91-1	Methyl furfuryl sulfide	3160	11482		
1438-94-4	1-Furfurylpyrrole	3284	2317		
1454-85-9	Heptadecan-1-ol				
1455-20-5	2-Butylthiophene				
1470-50-4	2-Octenoic acid		10156	216-001-6	
1490-04-6	DL-Menthol	2665	63	216-074-4	
1504-74-1	2-Methoxycinnamaldehyde	3181	571	216-131-3	
1504-75-2	p-Methylcinnamaldehyde	3640	10352		
1515-81-7	Methyl-4-methoxybenzyl ether			216-161-7	
1515-95-3	1-Ethyl-4-methoxybenzene				
1516-17-2	Hexa-2,4-dienyl acetate		10675	216-163-8	
1518-75-8	3-Propylthiophene				
1534-08-3	S-Methyl acetothioate			216-252-1	
1551-27-5	2-Propylthiophene			216-288-8	
1551-44-6	Cyclohexyl butyrate	2351	2082	216-290-9	
1552-67-6	Ethyl hex-2-enoate	3675	631	216-296-1	
1561-11-1	4-Methylhexanoic acid			216-336-8	
1565-81-7	Decan-3-ol	3605	10194		
1569-60-4	6-Methylhept-5-en-2-ol		10264	216-377-1	
1569-69-3	Cyclohexanethiol		529	216-378-7	
1575-74-2	2-Methylpent-4-enoic acid	3511	10148	216-404-7	
1576-77-8	Hept-3(trans)-enyl acetate	3493	10662	216-411-5	
1577-19-1	Oct-3-enoic acid		10157	216-418-3	
1587-18-4	Dibutyl malate				
1599-47-9	1,1-Dimethoxyhexane			216-488-5	
1599-49-1	4-Methyl-2-pentyl-1,3-dioxolane	3630			
1604-28-0	6-Methylhepta-3,5-dien-2-one	3363	11143	216-507-7	
1604-34-8	6,10-Dimethylundecan-2-one		11068	216-509-8	
1617-23-8	Ethyl 2-methylpent-3-enoate	3456	10612	216-572-1	
1617-32-9	trans-3-Pentenoic acid				
1618-26-4	2,4-Dithiapentane			216-577-9	
1629-58-9	Pent-1-en-3-one	3382	11179	216-624-3	
1629-60-3	Hex-1-en-3-one			216-625-9	
1632-73-1	Fenchyl alcohol	2480	87	216-639-5	
1634-04-4	2-Methoxy-2-methylpropane			216-653-1	
1639-09-4	Heptane-1-thiol		11485	216-678-8	
1653-30-1	Undecan-2-ol	3246	11826	216-722-6	
1669-44-9	Oct-3-en-2-one	3416	11170	216-793-3	
1670-46-8	2-Acetylcyclopentan-1-one			216-797-5	
1679-07-8	Cyclopentanethiol	3262	2321	216-841-3	
1679-09-0	2-Methylbutane-2-thiol			216-843-4	
1703-52-2	2-Ethyl-5-methylfuran		10942	216-937-5	
1708-36-7	2-Hexyl-5-hydroxy-1,3-dioxane		2016	216-961-6	
1726-47-2	Pseudo-cyclocitral		11849		

CAS	Synonyms	Systematic name
1335-46-2		
1335-66-6		1,3,5-Trimethylcyclohex-3-ene-1-carbaldehyde
1365-19-1		5-(1-hydroxy-1-isopropyl)-2-methyl-2-vinyl tetrahydrofuran
1438-91-1		
1438-94-4		
1454-85-9		
1455-20-5		
1470-50-4		
1490-04-6		
1504-74-1		3-(2-Methoxyphenyl)prop-2-enal
1504-75-2		3-(4-Methylphenyl)prop-2-enal
1515-81-7		
1515-95-3		
1516-17-2		
1518-75-8		
1534-08-3		
1551-27-5		
1551-44-6	Cyclohexyl butanoate	
1552-67-6		
1561-11-1		
1565-81-7		
1569-60-4		
1569-69-3	Cyclohexyl mercaptan	
1575-74-2		
1576-77-8		
1577-19-1		
1587-18-4		Dibutyl 2-hydroxybutanedioate
1599-47-9	Hexanal dimethyl acetal	
1599-49-1		
1604-28-0		
1604-34-8		
1617-23-8		
1617-32-9		
1618-26-4	Formaldehyde dimethyl mercaptal	
1629-58-9	Ethyl vinyl ketone	
1629-60-3		
1632-73-1	2-Fenchanol; alpha-Fenchol	1,3,3-Trimethyl-bicyclo[2.2.1]heptan-2-ol
1634-04-4		
1639-09-4	Heptyl mercaptan	
1653-30-1		
1669-44-9		
1670-46-8		
1679-07-8		
1679-09-0		
1703-52-2		
1708-36-7		
1726-47-2	alpha-Cyclocitral	2,6,6-Trimethylcyclohex-2-enecarbaldehyde

CAS	Name	FEMA	CoE	EINECS	Comments
1731-81-3	Undecyl acetate		10906	217-051-1	
1731-84-6	Methyl nonanoate	2724	389	217-052-7	
1731-86-8	Methyl undecanoate		10854	217-053-2	
1733-25-1	Isopropyl 2-methylcrotonate	3229	10733	217-067-9	
1741-41-9	1,1-Diethoxy-2-methylpropane		10015	217-107-5	
1759-28-0	4-Methyl-5-vinylthiazole	3313	11633	217-160-4	
1786-08-9	3,6-Dihydro-4-methyl-2-(2-methylprop-1-en-1-yl)-2H-pyran	3661		217-241-4	
1795-01-3	3-Ethylthiophene			217-267-6	
1797-74-6	Allyl phenylacetate	2039	2162	217-281-2	
1802-20-6	3-Pentylpyridine				
1803-39-0	1,10-Dihydronootkatone	3776			
1866-31-5	Allyl cinnamate	2022	334	217-477-8	
1871-67-6	Oct-2-enoic acid		10156	217-491-4	
1878-18-8	2-Methylbutane-1-thiol	3303	11509	217-515-3	
1883-78-9	Furfuryl isopropyl sulfide	3161	2248		
1901-26-4	3-Methyl-4-phenylbut-3-en-2-one	2734	161	217-599-1	
1901-38-8	2-(2,2,3-Trimethylcyclopent-3-enyl)ethan-1-ol	3741		217-600-5	
1963-36-6	4-Methoxycinnamaldehyde	3567	11919	217-807-0	
2021-28-5	Ethyl 3-phenylpropionate	2455	429	217-966-6	
2024-70-6	Ethyl furfuryl sulfide				
2035-99-6	3-Methylbutyl octanoate	2080	401	218-004-8	
2044-73-7	2-Pyridine methanethiol	3232	2279	218-061-9	
2046-17-5	Methyl 4-phenylbutyrate	2739	308	218-067-1	
2049-96-9	Pentyl benzoate		2307	218-077-6	
2050-01-3	Isopentyl isobutyrate	3507	294	218-078-1	
2050-08-0	Pentyl salicylate		613	218-080-2	
2050-09-1	Isopentyl valerate		648	218-081-8	
2050-87-5	Diallyl trisulfide	3265	486	218-107-8	
2051-50-5	sec-Octyl acetate		10799	218-123-5	
2051-78-7	Allyl butyrate	2021	280	218-129-8	
2051-96-9	Benzyl lactate			218-136-6	
2052-14-4	Butyl salicylate	3650	614	218-142-9	
2052-15-5	Butyl 4-oxovalerate	2207	374	218-143-4	
2084-18-6	3-Methylbutane-2-thiol	3304	11510	218-223-9	
2084-19-7	Pentane-2-thiol	3792		218-224-4	
2100-17-6	Pent-4-enal			218-265-8	
2102-59-2	(1R-cis)-2-Methyl-5-(1-methylethenyl)-2-cyclohexen-1			218-270-5	
2110-18-1	2-(3-Phenylpropyl)pyridine	3751		218-300-7	
2111-75-3	p-Mentha-1,8-dien-7-al	3557	11788	218-302-8	
2142-94-1	Neryl formate	2776	2060	218-401-6	
2153-26-6	alpha-Terpinyl formate	3052	348	218-444-0	
2153-28-8	Terpinyl butyrate	3049	278	218-445-6	
2173-56-0	Pentyl valerate		467	218-528-7	
2173-57-1	Isobutyl beta-naphthyl ether	3719	11886	218-529-2	
2177-77-7	Methyl 2-methylvalerate	3707		218-543-9	

CAS	Synonyms	Systematic name
1731-81-3		
1731-84-6		
1731-86-8		
1733-25-1	Isopropyl tiglate	Isopropyl 2-methylbut-2(trans)-enoate
1741-41-9	Isobutanal diethyl acetal; 2-Methylpropanal diethyl acetal	
1759-28-0		
1786-08-9		
1795-01-3		
1797-74-6	2-Propenyl phenylacetate	
1802-20-6		
1803-39-0		1,2,6-Trimethyl-9-isopropylene-bicyclo[4.4.0]decan-4-one
1866-31-5	Allyl-beta-phenylacrylate; Propenyl cinnamate; Allyl-3-phenyl propenoate	Allyl 3-phenylprop-2-enoate
1871-67-6		
1878-18-8		
1883-78-9		
1901-26-4	Benzylidene methyl acetone	
1901-38-8	alpha- Campholenic alcohol	
1963-36-6		3-(4-Methoxyphenyl)prop-2-enal
2021-28-5		
2024-70-6		
2035-99-6	Isoamyl octanoate; Isoamyl caprylate; isopentyl octanoate	
2044-73-7		
2046-17-5		
2049-96-9	Amyl benzoate; Isoamyl benzoate; 3-Methyl-1-butyl benzoate	
2050-01-3		3-Methylbutyl 2-methylpropanoate
2050-08-0	Isoamyl o-hydroxybenzoate; Isoamyl salicylate	Pentyl 2-hydroxybenzoate
2050-09-1	Isoamyl pentanoate; 3-Methylbutyl pentanoate	3-Methylbutyl pentanoate
2050-87-5	Allyl trisulfide; Prop-2-enyl-trithio prop-2-ene	
2051-50-5		1-Methylheptyl acetate
2051-78-7	Allyl-n-butyrate; Vinyl carbinyl butyrate	
2051-96-9		Benzyl 2-hydroxypropanoate
2052-14-4		Butyl 2-hydroxybenzoate
2052-15-5	Butyl laevulinate	
2084-18-6		
2084-19-7	sec- Amylmercaptan; 1- Methylbutanethiol; 2-Mercaptopentane	
2100-17-6		
2102-59-2		
2110-18-1		
2111-75-3	Perilla aldehyde	
2142-94-1		3,7-Dimethyl-2(cis),6-octadienyl formate
2153-26-6		
2153-28-8		p-Menth-1-en-8-yl butanoate
2173-56-0	Amyl pentanoate	
2173-57-1	2- Isobutoxynaphthalene; Fragarol	2-Methylpropyl beta-naphthyl ether
2177-77-7		

CAS	Name	FEMA	CoE	EINECS	Comments
2179-57-9	Diallyl disulfide	2028	485	218-548-6	
2179-58-0	Allyl methyl disulfide	3127	11866	218-549-1	
2179-59-1	Allyl propyl disulfide		600	218-550-7	
2179-60-4	Methyl propyl disulfide	3201	585	218-551-2	
2198-61-0	3-Methylbutyl hexanoate	2075	320	218-600-8	
2216-52-6	d-Neomenthol	2666	2028	218-691-4	
2216-69-5	1-Methoxynaphthalene			218-696-1	
2217-33-6	Tetrahydrofurfuryl propionate	3058	11843	218-710-6	
2230-90-2	Menthyl formate		10751	218-768-2	
2239-78-3	Propyl hexadecanoate		10893	218-803-1	
2244-16-8	d-Carvone	2249	146	218-827-2	
2257-09-2	Phenethyl isothiocyanate		11495	218-855-5	
2270-57-7	1,2-Dihydrolinalool				
2270-60-2	Methyl citronellate	3361	10781	218-874-9	
2277-19-2	Non-6(cis)-enal	3580	661	218-900-9	
2294-76-0	2-Pentylpyridine	3383	11412	218-937-0	
2305-05-7	Dodecano-1,4-lactone	2400	2240	218-971-6	
2305-21-7	Hex-2-en-1-ol	2562	69	218-972-1	
2305-25-1	Ethyl 3-hydroxyhexanoate	3545	11764	218-973-7	
2306-88-9	Octyl octanoate	2811	395	218-980-5	
2306-91-4	Isopentyl decanoate			218-982-6	
2307-10-0	Propyl thioacetate	3385	11576	218-984-7	
2308-18-1	Isopentyl acetoacetate	3551	227	218-991-5	
2311-46-8	Isopropyl hexanoate	2950	312	219-000-9	
2311-59-3	Isopropyl decanoate		10730	219-001-4	
2315-09-5	3-Hexenyl formate	3353	2153	219-017-1	
2315-68-6	Propyl benzoate	2931	677	219-020-8	
2344-70-9	4-Phenylbutan-2-ol	2879	85	219-055-9	
2345-24-6	Neryl isobutyrate	2775	299	219-061-1	
2345-26-8	Geranyl isobutyrate	2513	306	219-062-7	
2345-27-9	Tetradecan-2-one		11192	219-063-2	
2345-28-0	Pentadecan-2-one	3724	11808	219-064-8	
2346-00-1	2-Methyl-2-thiazoline			219-071-6	
2349-07-7	Hexyl isobutyrate	3172	646	219-075-8	
2349-13-5	Heptyl isobutyrate	2550	295	219-076-3	
2349-14-6	Methyl geranate		10797		
2363-88-4	2,4-Decadienal	3135	2120	219-114-9	
2363-89-5	Oct-2-enal	3215	663	219-115-4	
2379-55-7	2,3-Dimethylquinoxaline			219-162-0	
2396-77-2	Methyl-2-hexenoate	2709	583		
2396-78-3	Methyl hex-3-enoate	3364	10801	219-256-1	
2396-83-0	Ethyl hex-3-enoate	3342		219-257-7	
2396-84-1	Ethyl hexa-2,4-dienoate	2459	635	219-258-2	
2396-85-2	Methyl-2-octenoate	3712	11800	219-259-8	
2407-43-4	Hex-2-eno-1,4-lactone			219-304-1	

CAS	Synonyms	Systematic name
2179-57-9	Allyl disulfide	
2179-58-0		
2179-59-1		
2179-60-4	Propyl methyl disulfide; Methyl dithio propane	
2198-61-0	Isoamyl hexanoate; Isoamyl caproate; Isopentyl n-hexanoate	
2216-52-6		2-Isopropyl-5-methylcyclohexanol [1S-(1alpha,2alpha,5beta)]-
2216-69-5		
2217-33-6		
2230-90-2		p-Mentha-3-yl formate
2239-78-3	Propyl palmitate	
2244-16-8		d-p-Mentha-1,8-dien-2-one
2257-09-2		
2270-57-7		3,7-Dimethyloct-6-en-3-ol
2270-60-2		Methyl 3,7-dimethyloct-6-enoate
2277-19-2	cis-6-Nonen-1-al	
2294-76-0		
2305-05-7	gamma-Dodecalactone; Dodecanolide-1,4; gamma-n-octyl-gamma-n-butyrolactone	
2305-21-7	2- Hexenol	
2305-25-1		
2306-88-9		
2306-91-4		3-Methylbutyl decanoate
2307-10-0		
2308-18-1		3-Methylbutyl 3-oxobutanoate
2311-46-8	Isopropyl caproate	
2311-59-3	Isopropyl caprate	
2315-09-5		
2315-68-6		
2344-70-9	Phenylethyl methyl carbinol	
2345-24-6		3,7-Dimethyl-2(cis),6-octadienyl 2-methylpropanoate
2345-26-8	Geranyl 2-methylpropionate	3,7-Dimethylocta-2(trans),6-dienyl 2-methylpropanoate
2345-27-9		
2345-28-0	Methyl tridecyl ketone	
2346-00-1		
2349-07-7		Hexyl-2-methylpropanoate
2349-13-5		Heptyl 2-methylpropanoate
2349-14-6		
2363-88-4		
2363-89-5	alpha-Amylacrolein; 2-Pentyl acrolein	
2379-55-7		
2396-77-2		
2396-78-3		
2396-83-0		
2396-84-1	Ethyl sorbate	
2396-85-2		
2407-43-4	5- Ethyl-2(5H)-furanone	

CAS	Name	FEMA	CoE	EINECS	Comments
2408-20-0	Allyl propionate	2040	2094	219-307-8	
2408-37-9	2,2,6-Trimethylcyclohexanone	3473	686	219-309-9	
2412-80-8	Methyl 4-methylvalerate	2721	322	219-320-9	
2416-94-6	2,3,6-Trimethylphenol			219-330-3	
2432-42-0	Ethyl propanethioate			219-405-0	
2432-51-1	S-Methyl butanethioate	3310	2328	219-407-1	
2432-91-9	S-2-Butyl 3-methylbutanethioate			219-416-0	
2438-20-2	2-Methylbutyl propionate		10778	219-449-0	
2439-44-3	3-Methyl-2-phenylbutyraldehyde	2738	135	219-461-6	
2442-10-6	Oct-1-en-3-yl acetate	3582	11716	219-474-7	
2444-46-4	N-Nonanoyl 4-hydroxy-3-methoxybenzylamide	2787	590	219-484-1	
2444-49-7	Diallyl tetrasulfide		11449	219-485-7	
2445-67-2	Isobutyl 2-methylbutyrate		10710	219-492-5	
2445-69-4	2-Methylbutyl isobutyrate		10770	219-493-0	
2445-72-9	Pentyl isobutyrate		293	219-494-6	
2445-76-3	Hexyl propionate	2576	420	219-495-1	
2445-77-4	2-Methylbutyl isovalerate	3506	10772	219-496-7	
2445-78-5	2-Methylbutyl 2-methylbutyrate	3359	10773	219-497-2	
2445-93-4	Ethyl pent-2-enoate		10623	219-500-7	
2463-53-8	Non-2-enal	3213	733	219-562-5	
2463-63-0	2-Heptenal	3165	730	219-563-0	
2463-77-6	2-Undecenal	3423	11827	219-564-6	
2464-23-5	3-Mercapto-2-oxopropionic acid				
2478-38-8	4-Hydroxy-3,5-dimethoxyacetophenone		11105	219-610-5	
2482-39-5	Methyl dec-2-enoate		11799	219-618-9	
2497-18-9	Hex-2(trans)-enyl acetate	2564	643	219-680-7	
2497-21-4	4-Hexen-3-one	3352	718	219-681-2	
2510-99-8	Ethyl 2-phenylpropionate			219-727-1	
2518-53-8	2-Decen-1,4-lactone			219-742-3	
2527-76-6	2-Methyl-3-mercaptothiophene			219-770-6	
2530-10-1	3-Acetyl-2,5-dimethylthiophene	3527	11603	219-779-5	
2548-87-0	trans-2-Octenal	3215	663	219-833-8	
2550-18-7	2,6-Dimethyloct-6-en-3-one				
2550-26-7	4-Phenylbutan-2-one		11182	219-847-4	
2550-40-5	Dicyclohexyl disulfide	3448	2320	219-851-6	
2556-10-7	1-Ethoxy-1-(2-phenylethoxy)ethane		10049	219-868-9	
2568-25-4	4-Methyl-2-phenyl-1,3-dioxolane	2130	2226	219-906-4	
2601-13-0	2-Methylbutyl hexanoate		10768	220-005-3	
2623-23-6	Methyl-2-(1-methylethyl)cyclohexanol acetate			220-076-0	
2628-17-3	4-Vinylphenol	3739	11257	220-103-6	
2639-63-6	Hexyl butyrate	2568	271	220-136-6	
2679-87-0	2-Butyl ethyl ether	3131	10911	220-234-9	
2705-87-5	Allyl cyclohexanepropionate	2026	2223	220-292-5	
2719-08-6	Methyl N-acetylanthranilate			220-318-5	
2721-22-4	Tetradecano-1,5-lactone	3590	2196	220-334-2	

CAS	Synonyms	Systematic name
2408-20-0		
2408-37-9		
2412-80-8	Methyl 4-methylpentanoate	
2416-94-6		
2432-42-0		
2432-51-1	Methyl thiobutyrate	
2432-91-9		
2438-20-2		
2439-44-3	3- Methyl-2-phenylbutanal; alpha-Isopropylphenylacetaldehyde	
2442-10-6	Octenyl acetate; Amyl vinyl carbonyl acetate	1-Vinylhexyl acetate
2444-46-4	Pelargonyl vanillylamide; N-(4-Hydroxy-3-methoxybenzyl)nonanamide	
2444-49-7		
2445-67-2		2-Methylpropyl 2-methylbutanoate
2445-69-4		2-Methylbutyl 2-methylpropanoate
2445-72-9	Amyl isobutyrate	Pentyl 2-methylpropanoate
2445-76-3	Hexyl propanoate	
2445-77-4		2-Methylbutyl 3-methylbutanoate
2445-78-5		
2445-93-4		
2463-53-8	beta-Hexylacrolein; alpha-Nonenyl aldehyde; Nonylenic aldehyde	
2463-63-0		
2463-77-6		
2464-23-5		
2478-38-8	Acetosyringone	
2482-39-5		
2497-18-9	trans-2-Hexenyl acetate; 2-Hexen-1-yl acetate	
2497-21-4		
2510-99-8		
2518-53-8		
2527-76-6		
2530-10-1	2,5- Dimethyl-3-thienyl methyl ketone	
2548-87-0		
2550-18-7		
2550-26-7		
2550-40-5		
2556-10-7	Acetaldehyde ethyl 2-phenylethyl acetal	
2568-25-4	Benzaldehyde propylene glycol acetal	
2601-13-0		
2623-23-6		
2628-17-3		
2639-63-6	n-Hexyl n-butanoate	
2679-87-0		
2705-87-5	Allyl 3-cyclohexylpropionate	
2719-08-6		Methyl N-acetyl-2-aminobenzoate
2721-22-4	delta-Tetradecalactone, 2H-pyran-2-one	

CAS	Name	FEMA	CoE	EINECS	Comments
2756-56-1	Isobornyl propionate	2163	412	220-410-5	
2758-18-1	3-Methyl-2-cyclopenten-1-one	3435	11137	220-421-5	
2765-04-0	2,4,6-Trimethyl-1,3,5-trithiane				
2785-87-7	2-Methoxy-4-propylphenol	3598		220-499-0	
2785-89-9	4-Ethylguaiaicol	2436	176	220-500-4	
2835-39-4	Allyl isovalerate	2045	2098	220-609-7	
2847-30-5	2-Methoxy-3-methylpyrazine	3183	2266	220-651-6	
2882-20-4	2-Methyl-3-methylthiopyrazine			220-736-8	
2917-26-2	Hexadecane-1-thiol			220-846-6	
2922-51-2	Heptadecan-2-one		11089		
2949-92-0	Methyl methanethiosulfonate		11520	220-970-0	
2983-36-0	Ethyl 2-ethyl-3-phenylpropionate	3341	10587	221-042-8	
2985-28-6	Ethyl 2-acetoxypropionate				
3008-43-3	3-Methylcyclohexan-1,2-dione	3305	2311	221-122-2	
3025-30-7	Ethyldeca-2(cis),4(trans)-dienoate	3148	10574	221-178-8	
3033-23-6	2S-cis-Tetrahydro-4-methyl-2-(2-methyl-1-propenyl)-2H-pyran			221-217-9	
3054-95-3	1,1-Diethoxyprop-2-ene		10020	221-276-0	
3115-28-4	sec-Butyl hexanoate		10533		
3130-87-8	Asparagine		516	221-521-1	(1)
3142-66-3	3-Hydroxypentan-2-one	3550	11115		
3142-72-1	2-Methylpent-2-enoic acid	3195	11680	221-552-0	
3149-28-8	Methoxypyrazine	3302	11347	221-579-8	
3184-13-2	l-Ornithine monochlorohydrate			221-678-6	(1)
3188-00-9	4,5-Dihydro-2-methylfuran-3(2H)-one	3373	2338	221-685-4	
3194-17-0	2-Pentanoylfuran				
3208-16-0	2-Ethylfuran	3673	11706	221-714-0	
3208-40-0	2-(3-Phenylpropyl)tetrahydrofuran	2898	489	221-715-6	
3240-09-3	5-Methylhex-5-en-2-one	3365	11150	221-807-6	
3249-68-1	Ethyl 3-oxohexanoate	3683		221-835-9	
3268-49-3	3-(Methylthio)propionaldehyde	2747	125	221-882-5	
3269-90-7	p-Mentha-1,8(10)-dien-9-ol		10239	221-889-3	
3289-28-9	Ethyl cyclohexanecarboxylate	3544	11916	221-945-7	
3293-47-8	Dihydro-beta-ionol	3627		221-957-2	
3301-90-4	Heptano-1,5-lactone		10660	221-972-4	
3301-94-8	Nonano-1,5-lactone	3356	2194	221-974-5	
3302-03-2	4-Methylheptanoic acid				
3338-55-4	cis-3,7-Dimethyl-1,3,6-octatriene			222-081-3	
3360-41-6	4-Phenylbutan-1-ol		699	222-128-8	
3387-41-5	4(10)-Thujene		11018	222-212-4	
3390-12-3	2,4-Dimethyl-1,3-dioxolane			222-221-3	
3391-86-4	Oct-1-en-3-ol	2805	72	222-226-0	
3452-97-9	3,5,5-Trimethylhexan-1-ol	3324	702	222-376-7	
3460-44-4	1-Phenethyl butyrate	2686	2083	222-409-5	
3487-99-8	Pentyl cinnamate		328	222-478-1	

CAS	Synonyms	Systematic name
2756-56-1		1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl propanoate
2758-18-1	1- Methyl-1-cyclopenten-3-one	
2765-04-0		
2785-87-7	Dihydroeugenol	
2785-89-9		4-Ethyl-2-methoxyphenol
2835-39-4	2-Propenyl isopentanoate; Allyl isopentanoate	Allyl 3-methylbutanoate
2847-30-5	2- Methyl-3-methoxypyrazine	
2882-20-4		
2917-26-2		
2922-51-2		
2949-92-0		
2983-36-0	Ethyl alpha-ethyl-dihydrocinnamate	
2985-28-6	Ethyl acetylactate	
3008-43-3		
3025-30-7	Ethyl (2E,4Z)-decadienoate	
3033-23-6		
3054-95-3	2- Propenal diethyl acetal	
3115-28-4	But-2-yl caproate	1-Methylpropyl hexanoate
3130-87-8		
3142-66-3		
3142-72-1		
3149-28-8	2 Methoxy-1,4-diazine	
3184-13-2		
3188-00-9	Tetrahydro-2-methyl-3-oxofuran; 2-Methyltetrahydrofuran-3-one	
3194-17-0		
3208-16-0		
3208-40-0		
3240-09-3	2- Methylallylacetone	
3249-68-1		
3268-49-3	Methional; 3-(Methylthio)propanal	
3269-90-7	p-Mentha-1,8-dien-10-ol	
3289-28-9		
3293-47-8		4-(2,2,6-Trimethylcyclohex-1-enyl)-butan-2-ol
3301-90-4		
3301-94-8	delta-Nonalactone; 5-Hydroxynonanoic acid lactone; Nonanolide-1,5; n-butyl-delta-valerolactone	
3302-03-2		
3338-55-4		
3360-41-6		
3387-41-5		4-Methylene-1-isopropyl-bicyclo[3.1.0]hexane
3390-12-3		
3391-86-4	Amyl vinyl carbinol; (Amylvinylcarbinol); Matsutake alcohol	
3452-97-9		
3460-44-4	alpha-Methylbenzyl butyrate; Methyl phenyl carbonyl butyrate; Styrallyl butyrate	1-Phenylethyl acetate
3487-99-8	Amyl cinnamate	Pentyl 3-phenylprop-2-enoate

CAS	Name	FEMA	CoE	EINECS	Comments
3489-28-9	Nonane-1,9-dithiol	3513	11558	222-482-3	
3491-63-2	2-Phenylpent-2-enal				
3511-32-8	5-Methylfuran-3(2H)-one				
3549-23-3	Methyl p-tert-butylphenylacetate	2690	577	222-602-4	
3558-60-9	2-Methoxyethyl benzene	3198	11812	222-619-7	
3572-06-3	4-(4-Acetoxyphenyl)butan-2-one	3652		222-682-0	
3581-87-1	2-Methylthiazole		11626	222-702-8	
3581-91-7	4,5-Dimethylthiazole	3274	11606	222-703-3	
3600-24-6	Diethyl trisulfide		11451	222-754-1	
3603-99-4	Cyclotetradecanone			222-758-3	
3613-30-7	7-Methoxy-3,7-dimethyloctan-1-ol			222-784-5	
3658-77-3	4-Hydroxy-2,5-dimethylfuran-3(2H)-one	3174	536	222-908-8	
3658-79-5	1,1-Diethoxybutane		10017	222-909-3	
3658-80-8	Dimethyl trisulfide	3275	539	222-910-9	
3658-93-3	1,1-Diethoxyhexane		557	222-911-4	
3658-94-4	1,1-Diethoxy-2-methylbutane		10013		
3658-95-5	1,1-Diethoxybutane		10009	222-913-5	
3674-21-3	4-Hydroxymethyl-2-methyl-1,3-dioxolane				
3681-71-8	Hex-3(cis)-enyl acetate	3171	644	222-960-1	
3681-78-5	Propyl dodecanoate			222-961-7	
3682-42-6	Methyl 2-oxo-3-methylvalerate	3713			
3691-12-1	1(5),11-Guaiadiene		11003		
3720-16-9	3-Methyl-5-propylcyclohex-2-en-1-one	3577		223-069-0	
3724-65-0	But-2-enoic acid (cis and trans)		10080	223-077-4	
3738-00-9	1,5,5,9-Tetramethyl-13-oxatricyclo [8.3.0.0.(4.9)]tridecane	3471	10514	223-118-6	
3760-11-0	Non-2-enoic acid		10153	223-171-5	
3777-69-3	2-Pentylfuran	3317	10966	223-234-7	
3777-71-7	2-Heptylfuran	3401	10952	223-236-8	
3780-58-3	3-Methylhexanoic acid				
3782-00-1	2,3-Dimethylbenzofuran	3535	11913	223-245-7	
3796-70-1	Geranylacetone	3542	11088	223-269-8	
3842-03-3	1,1-Diethoxy-3-methylbutane		10014	223-335-6	
3848-24-6	Hexan-2,3-dione	2558	152	223-350-8	
3877-15-4	Methyl propyl sulfide		11541	223-403-5	
3891-59-6	Glucose pentaacetate	2524		223-439-1	
3913-71-1	Dec-2-enal	2366	2009	223-472-1	
3913-80-2	Oct-2-enyl acetate	3516	11906	223-473-7	
3913-81-3	trans-2-Decenal	2366	2009	223-474-2	
3913-85-7	Dec-2-enoic acid		10087	223-475-8	
3915-83-1	Neryl isovalerate	2778	508	223-478-4	
3943-74-6	Methyl vanillate		2305	223-525-9	
4077-47-8	2,5-Dimethyl-4-methoxyfuran-3(2H)-one	3664		223-797-9	
4104-45-4	3-(Methylthio)propylamine			223-875-2	
4110-50-3	Ethyl propyl sulfide		11479	223-890-4	
4112-89-4	Guaiacyl phenylacetate	2535	238	223-898-8	

CAS	Synonyms	Systematic name
3489-28-9		
3491-63-2		
3511-32-8		
3549-23-3		Methyl 4-(1,1-dimethylethyl)phenylacetate
3558-60-9	Methyl phenethyl ether	
3572-06-3		
3581-87-1		
3581-91-7		
3600-24-6		
3603-99-4		
3613-30-7		
3658-77-3	Furaneol	
3658-79-5	Valeraldehyde diethyl acetal; Pentanal diethyl acetal	
3658-80-8	Methyl trisulfide; Methyl trithio methane	
3658-93-3	Hexanal diethyl acetal	
3658-94-4	2-Methylbutanal diethyl acetal	
3658-95-5	Butanal diethyl acetal	
3674-21-3		
3681-71-8	cis-3-Hexen-1-yl acetate; cis-3-Hexenyl acetate	
3681-78-5	Propyl laurate	
3682-42-6	Methyl 2-keto-3-methylpentanoate	
3691-12-1	alpha-Guaiene	2,8-Dimethyl-5-isopropenyl-bicyclo[5.3.0] dec-1(7)-ene
3720-16-9		
3724-65-0	Crotonic acid (trans) + isoCrotonic acid (cis)	
3738-00-9		
3760-11-0		
3777-69-3		
3777-71-7		
3780-58-3		
3782-00-1		
3796-70-1	alpha,beta-dihydropseudoionone	6,10-Dimethyl-5(trans),9-undecadien-2-one
3842-03-3	Isovaleraldehyde diethyl acetal; 3-Methylbutanal diethyl acetal	
3848-24-6	Acetyl butyryl, methyl propyl diketone	
3877-15-4		
3891-59-6		1,2,3,4,6-Pentaacetyl-alpha-d-glucose and 1,2,3,4,6-pentaacetyl-beta-d-glucose
3913-71-1	Decen-2-al; Decenaldehyde	
3913-80-2		
3913-81-3		
3913-85-7		
3915-83-1	Neryl 3-Methylbutyrate; Neryl isovalerianate; Neryl beta-methyl butyrate	3,7-Dimethyl-2(cis),6-octadienyl 3-methylbutanoate
3943-74-6		Methyl 4-hydroxy-3-methoxybenzoate
4077-47-8	Mesifurane	
4104-45-4		
4110-50-3		
4112-89-4		2-Methoxyphenyl phenylacetate

CAS	Name	FEMA	CoE	EINECS	Comments
4124-63-4	Mercaptoacetaldehyde			223-929-5	
4124-88-3	Non-3-enoic acid		10154	223-932-1	
4128-31-8	(+/-)-2-Octanol	2801	71	223-938-4	
4166-20-5	4-Acetoxy-2,5-dimethylfuran-3(2H)-one	3797			
4170-30-3	2-Butenal		11736	224-030-0	
4175-66-0	2,5-Dimethylthiazole				
4177-16-6	Vinylpyrazine		11370	224-045-2	
4179-38-8	2-Octylfuran		10965	224-049-4	
4180-23-8	1-Methoxy-4-(prop-1(trans)-eny)lbenzene	2086	183	224-052-0	
4206-58-0	4-Hydroxy-3,5-dimethoxycinnamaldehyde		10341		
4208-49-5	Allyl 2-furoate	2030	360	224-128-3	
4219-24-3	Hex-3-enoic acid	3170	2256	224-157-1	
4221-98-1	(R)-5-(1-Methylethyl)-2-methyl-1,3-cyclohexadiene	2856	2117	224-167-6	
4229-91-8	2-Propylfuran		10971	224-182-8	
4230-97-1	Allyl octanoate	2037	400	224-184-9	
4253-89-8	Di-isopropyl disulfide		11455	224-225-0	
4265-16-1	2-Benzofurancarboxaldehyde	3128	2247	224-248-6	
4265-97-8	Heptyl octanoate	2553	399	224-252-8	
4276-68-0	2,5-Diethyl-4-propylthiazole				
4285-59-0	1,1-Di-isopropylethane				
4312-99-6	Oct-1-en-3-one	3515	2312	224-327-5	
4313-03-5	Hepta-2,4-dienal	3164		224-328-0	
4324-38-3	3-Ethoxypropionic acid		10096	224-357-9	
4351-54-6	Cyclohexyl formate	2353	498	224-415-3	
4352-99-2	4-Methyl-2-propyl-1,3-dioxolane			224-420-0	
4359-31-3	Vanillin butylene glycol acetal				
4359-46-0	2-Ethyl-4-methyl-1,3-dioxolane			224-435-2	
4395-92-0	p-Isopropyl phenylacetaldehyde	2954	132	224-522-5	
4410-99-5	2-Phenylethane-1-thiol		11561	224-563-9	
4411-89-6	2-Phenylcrotonaldehyde	3224	670	224-567-0	
4430-31-3	Octahydrocoumarin	3791		224-623-4	
4433-36-7	Tetrahydro-pseudo-ionone	3059	2053	224-634-4	
4437-20-1	Difurfuryl disulfide	3146	11480	224-649-6	
4437-22-3	Difurfuryl ether	3337	10930		
4437-51-8	Hexan-3,4-dione	3168	2255	224-651-7	
4440-65-7	3-Hexenal	2561	2008	224-659-0	
4442-79-9	2-Cyclohexylethan-1-ol			224-672-1	
4455-13-4	Ethyl 2-(methylthio)acetate			224-700-2	
4466-24-4	2-Butylfuran		10927	224-732-7	
4485-09-0	Nonan-4-one		11161	224-770-4	
4493-40-7	Naringin	2769	10286		
4493-42-9	Methyl deca-2,4-dienoate			224-787-7	
4500-58-7	2-(Ethylthio)phenol	3345	11666	224-811-6	
4501-58-0	2,2,3-Trimethylcyclopent-3-en-1-yl acetaldehyde	3592	10325	224-815-8	
4516-90-9	2-Methylbut-3-en-1-ol		10259		
4532-64-3	Butane-2,3-dithiol	3477	725	224-870-8	
4536-23-6	2-Methylhexanoic acid	3191	582	224-883-9	
4602-84-0	3,7,11-Trimethyldodeca-2,6,10-trien-1-ol	2478	78	225-004-1	
4606-15-9	Propyl phenylacetate	2955	229	225-012-5	

CAS	Synonyms	Systematic name
4124-63-4		
4124-88-3		
4128-31-8		
4166-20-5		
4170-30-3		
4175-66-0		
4177-16-6		
4179-38-8		
4180-23-8	trans-Anethole; Isoestragole	
4206-58-0	Sinapaldehyde	3-(4-Hydroxy-3,5-dimethoxyphenyl)prop-2-enal
4208-49-5	Allyl furan-2-carboxylate	
4219-24-3		
4221-98-1		
4229-91-8		
4230-97-1	Allyl caprylate	
4253-89-8		
4265-16-1	2- Formylbenzofuran	
4265-97-8		
4276-68-0		
4285-59-0	Acetaldehyde di-isopropyl acetal	
4312-99-6		
4313-03-5		
4324-38-3		
4351-54-6		
4352-99-2		
4359-31-3	4-Hydroxy-3-methoxybenzaldehyde2,3-butanediyl acetal	4-Ethyl-2-(4-hydroxy-3-methoxyphenyl)-1,3-dioxolane
4359-46-0		
4395-92-0	2-(p- Isopropylphenyl)acetaldehyde; Cumylacetaldehyde	
4410-99-5		
4411-89-6	2-Phenyl-but-2-en-1-al.	2-Phenylbut-2(trans)-enal
4430-31-3	Bicyclononalactone; Cyclohexyl lactone	Octahydro-1(2H)-benzopyran-2-one
4433-36-7		6,10-Dimethylundec-9-en-2-one
4437-20-1	bis-(2-Furfuryl)disulfide	
4437-22-3	Furfuryl ether	
4437-51-8	Dipropionyl	
4440-65-7		
4442-79-9		
4455-13-4		
4466-24-4		
4485-09-0		
4493-40-7		
4493-42-9		
4500-58-7	2-Ethylphenyl mercaptan	
4501-58-0	alpha-Campholenic aldehyde	
4516-90-9		
4532-64-3		
4536-23-6		
4602-84-0	Farnesol	
4606-15-9	Propyl alpha-toluate	

CAS	Name	FEMA	CoE	EINECS	Comments
4621-04-9	4-Isopropylcyclohexan-1-ol			225-035-0	
4630-07-3	Valencene	3443	11030	225-047-6	
4630-82-4	Methyl cyclohexanecarboxylate	3568	11920	225-050-2	
4634-89-3	Hex-4-enal	3496	10337	225-058-6	
4643-25-8	Hept-2-en-4-one	3399	11093	225-070-1	
4643-27-0	Oct-2-en-4-one	3603	2313	225-071-7	
4673-31-8	3-Propylpyridine		11419	225-122-3	
4674-50-4	Nootkatone	3166	11164	225-124-4	
4675-87-0	2-Methylbut-2-en-1-ol		10258	225-127-0	
4695-62-9	d-Fenchone	2479	551	225-160-0	
4707-47-5	Methyl 2,4-dihydroxy-3,6-dimethylbenzoate			225-193-0	
4728-82-9	Allyl cyclohexanecarboxylate	2023	2070	225-230-0	
4732-13-2	Carvacryl ethyl ether	2246	11840	225-238-4	
4744-08-5	1,1-Diethoxypropane		10018	225-257-8	
4744-10-9	1,1-Dimethoxypropane			225-258-3	
4747-07-3	Hexyl methyl ether			225-263-0	
4748-78-1	4-Ethylbenzaldehyde	3756	705	225-268-8	
4798-44-1	Hex-1-en-3-ol	3608	10220	225-355-0	
4798-61-2	Oct-2-en-4-ol			225-357-1	
4826-62-4	2-Dodecenal	2402	124	225-402-5	
4861-58-9	sec-Pentylthiophene		11634	225-465-9	
4861-85-2	Isopropyl phenylacetate	2956	2158	225-468-5	
4864-61-3	3-Octyl acetate	3583	2347	225-471-1	
4883-60-7	2-Hydroxy-3,5,5-trimethylcyclohex-2-en-1-one	3459	11198		
4887-30-3	Octyl hexanoate		10865	225-499-4	
4906-24-5	sec-Butan-3-onyl acetate	3526	608		
4938-52-7	1-Hepten-3-ol		10218	225-579-9	
4940-11-8	Ethyl maltol	3487	692	225-582-5	
4940-86-0	4-(beta-D-glucopyranosyloxy)-3-4-methoxybenzaldehyde				
4984-85-4	4-Hydroxyhexan-3-one		11108	225-637-3	
5058-19-5	2-Butylpyridine			225-758-1	
5076-72-2	1-Ethoxy-4-methoxybenzene			225-786-4	
5077-67-8	1-Hydroxybutan-2-one	3173	11102	225-790-6	
5132-75-2	Octyl heptanoate	2810	366	225-882-6	
5137-52-0	Pentyl phenylacetate		612	225-895-7	
5146-66-7	3,7-Dimethylocta-2,6-dienitrile			225-918-0	
5163-67-7	trans-3-Octenoic acid				
5166-53-0	5-Methylhex-3-en-2-one	3409	11149	225-950-5	
5205-07-2	3-Methylbut-3-enyl acetate			225-996-6	
5205-11-8	Prelyl benzoate			225-998-7	
5205-12-9	3-Methylbut-3-enyl benzoate				
5208-59-3	beta-Bourbonene		11931		
5271-38-5	2-(Methylthio)ethan-1-ol		11545	226-090-3	
5287-45-6	3-Methylbut-2-ene-1-thiol		11511		
5292-21-7	Cyclohexylacetic acid	2347	34	226-132-0	

CAS	Synonyms	Systematic name
4621-04-9		
4630-07-3	1,2,3,5,6,7,8a-Octahydro-1,8a-dimethyl-7-isopropenyl naphthalene	1,2-Dimethyl-9-isopropylene-bicyclo[4.4.0]dec-5-ene
4630-82-4		
4634-89-3		
4643-25-8		
4643-27-0		
4673-31-8		
4674-50-4		4,4a,5,6,7,8-Hexahydro-4,4a-dimethyl-6-(1-methylene-ethyl)-2(3H)-naphthalenone
4675-87-0		
4695-62-9	d-1,3,3-Trimethyl-2-norbornanone	1,3,3-Trimethyl-bicyclo[2.2.1]heptan-2-one
4707-47-5		
4728-82-9	Allyl cyclohexylacetate	
4732-13-2	2-Ethoxy-p-cymene	2-Ethoxy-4-isopropyl-1-methylbenzene
4744-08-5	Propanal diethyl acetal	
4744-10-9	Propanal dimethyl acetal	
4747-07-3		
4748-78-1		
4798-44-1		
4798-61-2		
4826-62-4		
4861-58-9		1-Methylbutylthiophene
4861-85-2		
4864-61-3		1-Ethylhexyl acetate
4883-60-7	3,5,5-Trimethylcyclohexane-1,2-dione	
4887-30-3		
4906-24-5	2-Acetoxy-3-butanone; AMC acetate	1-Methyl-2-oxopropyl acetate
4938-52-7		
4940-11-8	Veltol-Plus	2-Ethyl-3-hydroxy-4-pyrone
4940-86-0		
4984-85-4		
5058-19-5		
5076-72-2	Anisyl ethyl ether	
5077-67-8		
5132-75-2		
5137-52-0	Amyl phenylacetate	
5146-66-7		
5163-67-7		
5166-53-0		
5205-07-2		
5205-11-8		3-Methylbut-2-enyl benzoate
5205-12-9		
5208-59-3		2-Methyl-8-methylene-5-isopropyl-tricyclo[5.3.0.0(2.6)]decane
5271-38-5		
5287-45-6		
5292-21-7	Cyclohexanecarboxylic acid	

CAS	Name	FEMA	CoE	EINECS	Comments
5320-75-2	Cinnamyl benzoate		743	226-180-2	
5331-48-6	N-Acetylpropylamine			226-231-9	
5333-33-5	2-Butyrylthiophene				
5333-83-5	1-(2-Thienyl)butan-1-one			226-246-0	
5349-62-2	4-Methyl-1-phenylpentan-2-one	2740	159	226-316-0	
5350-03-8	Pentyl dodecanoate			226-319-7	
5355-17-9	4-Hydroxybenzyl methyl ether			226-334-9	
5362-56-1	4-Methylpent-2-enal	3510	10364	226-348-5	
5392-40-5	Citral	2303	109	226-394-6	
5396-89-4	Benzyl 3-oxobutyrate	2136	244	226-416-4	
5405-41-4	Ethyl 3-hydroxybutyrate	3428	10596	226-456-2	
5405-58-3	1,1-Dihexyloxyethane		10022	226-458-3	
5406-18-8	3-(4-Methoxyphenyl)propan-1-ol			226-463-0	
5421-00-1	Tetrahydrofurylphenylacetate			226-534-6	
5421-17-0	Hexyl phenylacetate	3457	10694	226-537-2	
5435-64-3	3,5,5-Trimethylhexanal	3524	10384	226-603-0	
5436-21-5	4,4-Dimethoxybutan-2-one	3381	10029	226-605-1	
5451-80-9	Heptyl valerate		10672	226-686-3	
5452-07-3	3-Phenylpropyl isovalerate	2899	462	226-692-6	
5452-75-5	Ethyl cyclohexyl acetate	2348	218	226-695-2	
5454-09-1	Decyl butyrate	2368	273	226-700-8	
5454-19-3	Decyl propionate	2369	408	226-703-4	
5454-28-4	Butyl heptanoate	2199	363	226-707-6	
5455-24-3	Octane-4,5-dione		2141		
5457-70-5	Phenethyl octanoate	3222	10884	226-718-6	
5458-59-3	Isopropyl octanoate		10731	226-721-2	
5461-06-3	Isobutyl octanoate		10714	226-744-8	
5461-08-5	Piperonyl isobutyrate	2913	305	226-745-3	
5466-06-8	Ethyl 3-mercaptopropionate	3677		226-771-5	
5468-06-4	4,5-Dimethyl-2-benzyl-1,3-dioxolan	2875	669		
5471-51-2	4-(p-Hydroxyphenyl)butan-2-one	2588	755	226-806-4	
5552-30-7	6,7,8,8a-Tetrahydro-2,5,5,8a-tetramethyl-5H-1-benzopyran			226-916-2	
5555-90-8	3-(5-Methyl-2-furyl)prop-2-enal				
5577-44-6	2,4-Octadienal	3721	11805	250-147-1	
5579-78-2	Decano-1,6-lactone	3613		226-963-9	
5601-60-5	8-Methyldecanoic acid				
5616-51-3	2-Methyl-1,3-dithiolane	3705		227-038-2	
5650-43-1	1-(3,5-Dimethoxy-4-hydroxyphenyl)propan-1-one		11106		
5655-61-8	(1S-endo)-1,7,7-			227-101-4	
5660-60-6	Cinnamaldehyde ethylene glycol acetal	2287	48	227-110-3	
5669-09-0	1,1-Di-isobutoxyethane		10023	227-129-7	
5703-26-4	p-Methoxyphenylacetaldehyde			227-191-5	
5756-24-1	Dimethyl tetrasulfide		11459	227-278-8	
5760-50-9	Methyl undec-9-enoate	2750	2101	227-279-3	
5837-78-5	Ethyl 2-methylcrotonate	2460	2185	227-425-6	
5870-68-8	Ethyl 3-methylvalerate	3679		227-524-4	

CAS	Synonyms	Systematic name
5320-75-2		3-Phenylprop-2-enyl benzoate
5331-48-6	N-Propylacetamide	
5333-33-5		
5333-83-5		
5349-62-2	Benzyl isobutyl ketone	
5350-03-8	Amyl dodecanoate	
5355-17-9		
5362-56-1		
5392-40-5	Lemarome	3,7-Dimethylocta-2,6-dienal
5396-89-4	Benzyl acetoacetate	
5405-41-4		
5405-58-3	Acetaldehyde dihexyl acetal	
5406-18-8		
5421-00-1		
5421-17-0		
5435-64-3	Isononylaldehyde; tert-butylisopentanal	
5436-21-5	Acetylacetaldehyde dimethyl acetal; 3-Oxobutanal dimethyl acetal	
5451-80-9	Heptyl pentanoate	
5452-07-3		3- Phenylpropyl 3-methylbutanoate
5452-75-5		
5454-09-1		
5454-19-3		
5454-28-4		
5455-24-3	Dibutyryl	
5457-70-5	2- Phenylethyl caprylate	
5458-59-3	Isopropyl caprylate	
5461-06-3		2-Methylpropyl octanoate
5461-08-5	Piperonyl 2-methylpropionate	3,4-Methylenedioxybenzyl 2-methylpropanoate
5466-06-8		
5468-06-4	Phenylacetaldehyde 2,3-butylene glycol acetal	
5471-51-2	p-Hydroxybenzyl acetone; oxyphenalon; frambinone	
5552-30-7		
5555-90-8		
5577-44-6		
5579-78-2	epsilon- Decalactone	
5601-60-5		
5616-51-3		
5650-43-1	Propiosyringone; 3,5-Dimethoxy-4-hydroxypropiofenone	
5655-61-8		
5660-60-6		2-(2-Phenylethylene)-1,3-dioxolane
5669-09-0	Acetaldehyde di-isobutyl acetal	1,1-Di(2-methylpropoxy)ethane
5703-26-4		
5756-24-1		
5760-50-9	Methylundecylenate	
5837-78-5	Ethyl tiglate	Ethyl 2-methylbut-2(trans)-enoate
5870-68-8		

CAS	Name	FEMA	CoE	EINECS	Comments
5870-93-9	Heptyl butyrate	2549	504	227-526-5	
5897-45-0	Methyl isoprenyl sulfide				
5905-46-4	Prop-1-enyl propyl disulfide	3227	11699	227-604-9	
5905-47-5	Methyl prop-1-enyl disulfide	3576	11712	227-605-4	
5910-58-0	2,4-Heptadienal	3164	729	227-627-4	
5910-87-2	trans-2, trans-4-Nonadienal	3212	732	227-629-5	
5910-89-4	2,3-Dimethylpyrazine	3271	11323	227-630-0	
5921-82-4	sec-Heptyl acetate		10802	227-647-3	
5925-68-8	S-Methyl benzothioate		11505	227-656-2	
5925-75-7	S-Methyl propanethioate				
5933-87-9	Pentyl decanoate		611	227-682-4	
5943-31-7	Dibutyl trisulfide				
5945-46-0	Piperitenone 1,2-oxide		10508		
5947-36-4	Pinocarveol	3587	10303	227-705-8	
5948-04-9	Dihydrocarvone	3565	11703		
5953-49-1	sec-Hexyl acetate		10840	227-716-8	
5986-38-9	Ocimenol			227-806-7	
5986-55-0	Patchoulol			227-807-2	
5989-27-5	d-Limonene	2633	491	227-813-5	
5989-33-3	5(2-Hydroxyisopropyl)-2-methyl-2-vinyltetra(...?)	3746	2214		
5989-54-8	l-Limonene	2633	491	227-815-6	
6028-61-1	Dipropyl trisulfide	3276	726	227-903-4	
6032-29-7	Pentan-2-ol	3316	11696	227-907-6	
6066-49-5	3-Butylphthalide	3334	10084	228-000-8	
6070-16-2	Menthyl hexanoate			228-007-6	
6091-50-5	p-1-Menthenone-3	2910	2052		
6117-91-5	But-2-en-1-ol		11737	228-086-7	
6119-47-7	Quinine monohydrochloride dihydrate				(3)
6119-70-6	Quinine sulphate				(3)
6126-50-7	Hex-4-en-1-ol	3430	2295		
6175-49-1	Dodecan-2-one		11069	228-222-5	
6208-91-9	Methyl dodec-2-enoate		10792		
6222-35-1	Cyclohexyl propionate	2354	421	228-303-5	
6243-10-3	Cyclohexyl hexanoate		528	228-354-3	
6258-63-5	2-Thiophenemethanethiol			228-394-1	
6259-76-3	Hexyl salicylate		10695	228-408-6	
6261-18-3	trans-3-Methyl-2-(2-pentenyl)-2-cyclopenten-1-one	3196	11786	228-410-7	
6270-55-9	Furfuryl isobutyrate		10641	228-453-1	
6270-56-0	Ethyl furfuryl ether		10940	228-454-7	
6281-40-9	3-Phenylpropyl hexanoate	2896	321	228-490-3	
6284-46-4	Isopropyl crotonate		10729		
6290-17-1	Ethyl 2,4-dimethyl-1,3-dioxolane-2-acetate			228-536-2	
6290-37-5	2-Phenethyl hexanoate	3221	10882	228-538-3	
6297-41-2	Butyl 2-methylvalerate			228-569-2	
6304-24-1	2-Isobutylpyridine	3370	11395	228-606-2	
6309-51-9	3-Methylbutyl dodecanoate	2077	379	228-626-1	
6378-65-0	Hexyl hexanoate	2572	316	228-952-4	

CAS	Synonyms	Systematic name
5870-93-9	Heptyl butanoate	
5897-45-0		2-Methyl-1-methylthio-1,3-butadiene
5905-46-4	Propyl propenyl disulfide	
5905-47-5		
5910-58-0		
5910-87-2		
5910-89-4		
5921-82-4		1-Methylhexyl acetate
5925-68-8	Methane thiobenzoate	
5925-75-7		
5933-87-9		
5943-31-7		
5945-46-0		
5947-36-4	2(10)- Pinen-3-ol,	3-Hydroxy-6,6-dimethyl-2-methylene-bicyclo[3.1.1]heptane
5948-04-9		
5953-49-1		1-Methylpentyl acetate
5986-38-9		2,6- Dimethylocta-5,7-dien-2-ol
5986-55-0	Patchouli alcohol	Octahydro-4,8a,9,9-tetramethyl-1,6-methanonaphthalen-1(2H)-ol
5989-27-5		p-Mentha-1,8-diene
5989-33-3		
5989-54-8		
6028-61-1	Propyl trisulfide; Propyl trithio propane	
6032-29-7	sec-Amyl alcohol; alpha-Methyl butanol; Methyl n-OKpropyl carbinol	
6066-49-5		
6070-16-2		p-Menthane-3-yl hexanoate
6091-50-5		
6117-91-5		
6119-47-7		
6119-70-6		
6126-50-7		
6175-49-1		
6208-91-9		
6222-35-1		
6243-10-3		
6258-63-5	Thenyl mercaptan	
6259-76-3	n-Hexyl o-hydroxybenzoate	Hexyl 2-hydroxybenzoate
6261-18-3		
6270-55-9		Furfuryl 2-methylpropanoate
6270-56-0	2-(Ethoxymethyl)furan	
6281-40-9		
6284-46-4		Isopropyl but-2(trans)-enoate
6290-17-1	Ethyl acetoacetate propyleneglycol ketal	
6290-37-5		
6297-41-2	Butyl 2-methylpentanoate	
6304-24-1		2-(2-Methylpropyl)pyridine
6309-51-9	Isoamyl laurate	
6378-65-0	Hexyl caproate	

CAS	Name	FEMA	CoE	EINECS	Comments
6379-73-3	Carvacryl methyl ether		11224	228-959-2	
6380-23-0	1,2-Dimethoxy-4-vinylbenzene	3138	11228	228-962-9	
6380-28-5	Carvacryl acetate			228-963-4	
6382-06-5	Pentyl lactate			228-974-4	
6454-22-4	2-Hexyl-4,5-dimethyl-1,3-dioxolane			229-261-0	
6485-40-1	l-Carvone	2249	146	229-352-5	
6513-03-7	Propyl nonanoate		2351	229-403-1	
6622-76-0	Methyl 2-methylcrotonate			229-575-8	
6624-58-4	sec-Heptyl hexanoate		10805	229-582-6	
6624-71-1	Dodecyl isobutyrate	3452	10563	229-583-1	
6627-88-9	4-Allyl-2,6-dimethoxyphenol	3655	11214	229-600-2	
6638-05-7	4-Methyl-2,6-dimethoxyphenol	3704		229-641-6	
6728-26-3	Hex-2(trans)-enal	2560	748	229-778-1	
6728-31-0	Hept-4-enal	3289	2124	229-779-7	
6738-23-4	1,3-Dimethyl-4-methoxybenzene			229-794-9	
6750-03-4	Nona-2,4-dienal	3212	732	229-810-4	
6753-98-6	3,7,10-Humulatriene		11004	229-816-7	
6766-82-1	2,6-Dimethoxy-4-propylphenol	3729			
6789-80-6	Hex-3(cis)-enal	2561	2008	229-854-4	
6789-88-4	Hexyl benzoate	3691	645	229-856-5	
6790-58-5	1,5,5,9-Tetramethyl-13-oxatricyclo[8.3.0.0.(4.9)]tridecane	3471	10514	229-861-2	
6812-78-8	(S)-3,7-Dimethyl-7-octen-1-ol	2980	76	229-887-4	
6849-18-9	Ethyl 4-methylpent-3-enoate		10615		
6901-97-9	4-(2,6,6-Trimethylcyclohex-2-en-1-yl)but-3-en-2-one	2594	141	230-010-2	
6911-51-9	2-Thienyl disulfide	3323	2333		
6915-15-7	l-Malic acid	2655	17	230-022-8	(1)
6938-45-0	Benzyl hexanoate		10521	230-068-9	
6963-52-6	sec-Hexyl butyrate				
6963-56-0	p-Anisyl butyrate	2100	286	230-163-5	
6975-60-6	1-(2-Furyl)-propan-2-one	2496	11837	230-234-0	
6976-72-3	Heptyl hexanoate		10666	230-239-8	
6982-72-5	2-Acetyl-5-methylpyrrole				
6986-51-2	1-Isobutoxy-1-ethoxyethane		10054	230-251-3	
7011-83-8	5-Hexyl-5-methyldihydrofuran-2(3H)-one	3786		230-291-1	
7069-41-2	trans-2-Tridecenal	3082	2011	230-362-7	
7143-69-3	Linalyl phenylacetate	3501	655	230-444-2	
7149-26-0	Linalyl anthranilate	2637	256	230-472-5	
7149-29-3	2-Methylallyl butyrate	2678	572	230-474-6	
7149-32-8	Phenethyl 2-furoate	2865	362		
7200-25-1	l-Arginine		10176	230-571-3	(1)
7212-44-4	Nerolidol	2772	67	230-597-5	
7217-59-6	2-Mercaptoanisole		11880	230-605-7	
7251-61-8	2-Methylquinoxaline			230-664-9	
7335-26-4	Ethyl 2-methoxybenzoate			230-843-1	
7341-17-5	2-Ethylhexane-1-thiol			230-854-1	
7367-81-9	Methyl oct-2(trans)-enoate	3712	11800	230-912-6	

CAS	Synonyms	Systematic name
6379-73-3		4-Isopropyl-2-methoxy-1-methylbenzene
6380-23-0	3,4- Dimethoxystyrene	
6380-28-5		5-Isopropyl-2-methyl phenyl acetate
6382-06-5		Pentyl 2-hydroxypropanoate
6454-22-4		
6485-40-1		l-p-Mentha-1,8-dien-2-one
6513-03-7	Propyl pelargonate	
6622-76-0	Methyl tiglate	Methyl 2-methylbut-2(trans)-enoate
6624-58-4		1-Methylhexyl hexanoate
6624-71-1		Dodecyl 2-methylpropanoate
6627-88-9		
6638-05-7	4- Methylsyringol; 2,6- Dimethoxy-p-cresol	
6728-26-3	Leaf aldehyde	
6728-31-0	Cis-4-Hepten-1-al; cis-4-Ethylidene butyraldehyde	
6738-23-4	2,4- Dimethyl-1-methoxybenzene	
6750-03-4		
6753-98-6	alpha-Humulene; alpha-Caryophyllene	1,5,5,8-Tetramethylcycloundeca-3,7,10-triene
6766-82-1	4- Propylsyringol	
6789-80-6	cis-beta,gamma-Hexylenic aldehyde	
6789-88-4	n-Hexyl benzoate	
6790-58-5	Ambrox	
6812-78-8		
6849-18-9		
6901-97-9		
6911-51-9	2,2-Dithiodithiophene	
6915-15-7	Hydroxysuccinicacid	2-Hydroxybutane-1,4-dioic acid
6938-45-0		
6963-52-6		1-Methylpentyl butanoate
6963-56-0		4-Methoxybenzyl butanoate
6975-60-6	Furfuryl methyl ketone; 2- Acetyl-furan; Furyl acetone	
6976-72-3		
6982-72-5		
6986-51-2	Acetaldehyde ethyl isobutyl acetal	1-Ethoxy-1-(2-methylpropoxy)ethane
7011-83-8	Methyl gamma-decalactone; Dihydrojasmon lactone; gamma-Methyldecalactone	
7069-41-2		
7143-69-3	Linalyl alpha-toluate	1,5-Dimethyl-1-vinylhex-4-enyl phenylacetate
7149-26-0	Linalyl o-aminobenzoate	1,5-Dimethyl-1-vinylhex-4-enyl 2-aminobenzoate
7149-29-3		2-Methylprop-2-enyl butanoate
7149-32-8		
7200-25-1		
7212-44-4	3,7,11- Trimethyl-1,6,10-dodecatrien-3-ol	3,7,11-Trimethyl-1,6(cis),10-dodecatrien-3-ol
7217-59-6	Thioguaiacol; 2- Methoxythiophenol	2-Methoxybenzene-1-thiol
7251-61-8		
7335-26-4		
7341-17-5		
7367-81-9		

CAS	Name	FEMA	CoE	EINECS	Comments
7367-82-0	Ethyl oct-2(trans)-enoate	3643	10617	230-913-1	
7367-83-1	Methyl dec-4-enoate		10784	230-914-7	
7367-88-6	Ethyl dec-2-enoate	3641	10577	230-918-9	
7370-44-7	Hexadecano-1,5-lactone		10674	230-924-1	
7370-92-5	Tridecano-1,5-lactone		10902	230-927-8	
7392-19-0	2,6,6-Trimethyl-2-vinyltetrahydropyran	3735	10976	230-983-3	
7402-29-1	3-Phenylpropyl butyrate			231-005-8	
7416-35-5	2,2-Dimethyl-5-(1-methylprop-1-enyl)tetrahydrofuran	3665	10937	231-028-3	
7452-79-1	Ethyl 2-methylbutyrate	2443	265	231-225-4	
7460-74-4	Phenethyl valerate		673	231-246-9	
7492-37-7	3-Benzylheptan-4-one	2146	2140	231-317-4	
7492-39-9	1-Benzyl-1-(2-methoxyethoxy)ethane	2148	523		
7492-41-3	Bornyl formate	2161	349	231-319-5	
7492-44-6	alpha-Butylcinnamaldehyde	2191	127	231-320-0	
7492-45-7	Butyl dec-2-enoate	2194	2100		
7492-65-1	Cinnamyl phenylacetate	2300	235	231-322-1	
7492-66-2	Citral diethyl acetal	2304	38	231-323-7	
7492-67-3	Citronellyl oxyacetaldehyde	2310	2012	231-324-2	
7492-69-5	Benzyl 2,3-dimethylcrotonate	2143	11868		
7492-70-8	Butyl-O-butyryllactate	2190	2107	231-326-3	
7493-57-4	1-Phenylethoxy-1-propoxy ethane	2004	511	231-327-9	
7493-57-4	[2-(1-Propoxyethoxy)ethyl]benzene	2004		231-327-9	
7493-58-5	4-Methylpentan-2,3-dione	2730	2043	231-328-4	
7493-59-6	Undeca-2,3-dione	3090	155	231-330-5	
7493-63-2	Allyl anthranilate	2020	254	231-331-0	
7493-65-4	Allyl cyclohexanebutyrate	2024	283		
7493-66-5	Allyl cyclohexanehexanoate	2025	2180		
7493-68-7	Allyl cyclohexanevalerate	2027	474		
7493-69-8	Allyl 2-ethylbutyrate	2029	281	231-332-6	
7493-71-2	Allyl 2-methylcrotonate	2043	2183	231-333-1	
7493-72-3	Allyl nonanoate	2036	390	231-334-7	
7493-74-5	Allyl phenoxyacetate	2038	228	231-335-2	
7493-75-6	Allyl hexa-2,4-dienoate	2041	2182	231-336-8	
7493-76-7	Allyl undec-10-enoate	2044	441	231-337-3	
7493-78-9	alpha-Pentylcinnamyl acetate	2064	216	231-339-4	
7493-79-0	alpha-Pentylcinnamyl formate	2066	357	231-341-5	
7493-80-3	alpha-Pentylcinnamyl isovalerate	2067	463		
7493-82-5	Pentyl heptanoate	2073	370	231-342-0	
7533-07-5	2-Acetyl-4-methylthiazole		11589		
7540-51-4	(-)-3,7-Dimethyl-6-octen-1-ol	2309	59	231-415-7	
7540-53-6	Citronellyl valerate	2317	469	231-416-2	
7549-33-9	p-Anisyl propionate	2102	426	231-433-5	
7549-37-3	Citral dimethyl acetal	2305	39	231-434-0	
7549-41-9	Bornyl valerate	2164	471	231-435-6	
7549-43-1	Quinine chlorhydrate				(3)
7554-12-3	Diethyl malate	2374	382	231-444-5	
7563-33-9	Ammonium isovalerate	2054	464	231-458-1	

CAS	Synonyms	Systematic name
7367-82-0		
7367-83-1		
7367-88-6		
7370-44-7		
7370-92-5		
7392-19-0	Bois de rose oxide	
7402-29-1		
7416-35-5		
7452-79-1		
7460-74-4	Phenethyl pentanoate	
7492-37-7		
7492-39-9	Acetaldehyde benzyl methoxyethyl acetal	
7492-41-3		1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-yl formate
7492-44-6		2-Butyl-3-phenylprop-2-enal
7492-45-7		
7492-65-1		3-Phenylprop-2-enyl phenyl acetate
7492-66-2		1,1-Diethoxy-3,7-dimethylocta-2,6-diene
7492-67-3	Citronelloxyacetaldehyde	6,10-Dimethyl-3-oxaundec-9-enal
7492-69-5	Benzyl methyltiglate	Benzyl-2,3-dimethylbut-2(trans)-enoate
7492-70-8	Butyl butyrolactate	Butyl 2-butanoyloxypropanoate
7493-57-4	Acetaldehyde phenethyl propyl acetal	
7493-57-4		
7493-58-5	Acetyl isobutyryl	
7493-59-6	Acetyl nonanyl	
7493-63-2		Allyl 2-aminobenzoate
7493-65-4	Allyl cyclohexylbutyrate	
7493-66-5	Allyl 3-cyclohexylhexanoate	
7493-68-7	Allyl cyclohexanepentanoate	
7493-69-8		
7493-71-2	Allyl tiglate	Allyl 2-methylbut-2(trans)-enoate
7493-72-3		
7493-74-5	AcetateP.A.	
7493-75-6	Allyl Sorbate	
7493-76-7		
7493-78-9		2-Pentyl-3-phenylprop-2-enyl acetate
7493-79-0		2-Pentyl-3-phenylprop-2-enyl formate
7493-80-3	alpha-Amylcinnamyl 3-methylbutyrate	2-Pentyl-3-phenylprop-2-enyl 3-methylbutanoate
7493-82-5	Amyl heptanoate	
7533-07-5		
7540-51-4		
7540-53-6		3,7-Dimethyloct-6-enyl pentanoate
7549-33-9		4-Methoxybenzyl propanoate
7549-37-3		1,1-Dimethoxy-3,7-dimethylocta-2,6-diene
7549-41-9	Bornyl pentanoate	1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-yl pentanoate
7549-43-1		
7554-12-3		Diethyl 2-hydroxybutanedioate
7563-33-9		Ammonium 3-methylbutanoate

CAS	Name	FEMA	CoE	EINECS	Comments
7664-41-7	Ammonia		739	231-635-3	(4)
7681-88-1	2,3-Dihydrofarnesene				
7756-96-9	Butyl anthranilate	2181	252	231-816-7	
7764-50-3	Dihydrocarvone	3565	11703	231-857-0	
7771-44-0	5,8,11,14-Eicosatetraenoic acid				(1)
7774-44-9	Cyclohexyl isovalerate	2355	459	231-874-3	
7774-47-2	4-Butyloctano-1,4-lactone	2372	2231	231-875-9	
7774-60-9	1-Methyl-1-phenethyl isobutyrate	2388	11828	231-876-4	
7774-65-4	Terpinyl 2-methylpropionate	3050	300	231-878-5	
7774-73-4	3-Mercaptothiophene			231-880-6	
7774-74-5	2-Mercaptothiophene	3062	478	231-881-1	
7774-79-0	4-(p-Tolyl)butan-2-one	3074	160		
7774-82-5	Tridec-2-enal	3082	2011	231-883-2	
7774-96-1	Isoeugenyl formate	2474	356	231-884-8	
7775-00-0	3-(4-Isopropylphenyl)propionaldehyde	2957	2261	231-885-3	
7775-38-4	1-Phenethyl formate	2688	574	231-893-7	
7775-39-5	1-Phenethyl isobutyrate	2687	2088	231-894-2	
7778-83-8	Propyl cinnamate	2938	324	231-916-0	
7778-87-2	Propyl heptanoate	2948	367	231-917-6	
7778-96-3	Rhodinyl isovalerate	2987	460	231-919-7	
7779-07-9	2,6-Dimethyloctanal	2390	112		
7779-16-0	Cyclohexyl anthranilate	2350	257	231-920-2	
7779-17-1	Cyclohexyl cinnamate	2352	337	231-921-8	
7779-23-9	Linalyl hexanoate	2643	318	231-922-3	
7779-41-1	10,10-Dimethoxydecane	2363	43	231-928-6	
7779-50-2	Hexadec-6-eno-1,16-lactone	2555	180	231-929-1	
7779-54-6	3-Oxononan-1-yl acetate		2076		
7779-65-9	Isopentyl cinnamate	2063	335	231-931-2	
7779-66-0	Isopentyl 4-(2-furan)butyrate	2070	2080		
7779-67-1	Isopentyl 3-(2-furan)propionate	2071	2092	231-932-8	
7779-70-6	3-Methylbutyl nonanoate	2078	391	231-933-3	
7779-72-8	Isopentyl pyruvate	2083	431	231-934-9	
7779-73-9	Isobornyl isovalerate	2166	452	231-935-4	
7779-75-1	Isobutyl acetoacetate	2177	242	231-937-5	
7779-77-3	Isobutyl anthranilate	2182	253	231-938-0	
7779-78-4	4-Methyl-1-phenylpentan-2-ol	2208	2031	231-939-6	
7779-80-8	Isobutyl heptanoate	2200	364	231-940-1	
7779-81-9	Isobutyl 2-methylbut-2(cis)-enoate	2180	247	231-941-7	
7779-94-4	1,1-Diethoxy-3,7-dimethyloctan-7-ol	2584	44	231-945-9	
7780-06-5	Isopropyl cinnamate	2939	325	231-949-0	
7783-06-4	Hydrogen sulfide	3779	647	231-977-3	
7784-67-0	1-Ethoxy-2-methoxy-4-(prop-1-enyl)benzene	2472	190	232-072-6	
7784-98-7	Methyl-delta-ionone	2713	11852	232-074-7	
7785-33-3	Geranyl 2-methylcrotonate		11829	232-078-9	

CAS	Synonyms	Systematic name
7664-41-7		
7681-88-1		
7756-96-9		Butyl 2-aminobenzoate
7764-50-3		p-Menth-8(10)-en-2-one
7771-44-0		
7774-44-9		Cyclohexyl-3-methylbutanoate
7774-47-2	4,4-Dibutyl-gamma-butyrolactone	
7774-60-9	Dimethylphenyl carbinyl isobutyrate; Phenylpropan-2-yl 2-methylpropionate; alpha,alpha- Dimethylbenzyl isobutyrate	1-Methyl-1-(2-phenylethyl) 2-methylpropanoate
7774-65-4	Terpinyl isobutyrate; 1-Methyl-1-(4-methylcyclohex-3-enyl)ethyl 2-methylpropionate	p-Menth-1-en-8-yl isobutyrate
7774-73-4	Thiophene-3-thiol	
7774-74-5	2- Thienyl mercaptan	
7774-79-0		4-(4-Methylphenyl)butan-2-one
7774-82-5		
7774-96-1		2-Methoxy-4-(prop-1-enyl)phenyl formate
7775-00-0	Cuminyaldehyde	
7775-38-4	alpha-Methylbenzyl formate	
7775-39-5	alpha-Methylbenzyl isobutyrate; Methyl phenyl carbinyl butyrate; Styrallyl isobutyrate	1-(2-Phenylethyl) 2-methylpropanoate
7778-83-8		Propyl 3-phenylprop-2-enoate
7778-87-2		
7778-96-3	alpha-Citronellyl isopentanoate	3,7-Dimethyloct-7-enyl 3-methylbutanoate
7779-07-9		
7779-16-0		Cyclohexyl 2-aminobenzoate
7779-17-1		Cyclohexyl 3-phenylprop-2-enoate
7779-23-9		1,5-Dimethyl-1-vinylhex-4-enyl hexanoate
7779-41-1	Decanal dimethyl acetal; Decylaldehyde DMA; Aldehyde C-10 dimethylacetal	
7779-50-2	Ambrettolide; omega-6-Hexadecenlactone; 16-Hydroxy-7-hexadecenoic acid lactone; Cyclohexadecen-7-olide	
7779-54-6		
7779-65-9	Isoamyl cinnamate	3-Methylbutyl 3-phenylprop-2-enoate
7779-66-0	Isopentyl furyl-2-butyrate; Isoamyl furfurylpropionate	3-Methylbutyl 4-(2-furan)butanoate
7779-67-1	Isoamyl furylpropionate; Isoamyl furfurylacetate	3-Methylbutyl 3-(2-furan)propanoate
7779-70-6	Isoamyl pelargonate	
7779-72-8		3-Methylbutyl 2-oxopropanoate
7779-73-9	Isobornyl 3-methylbutyrate	1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl 3-methylbutanoate
7779-75-1		2-Methylpropyl 3-oxobutanoate
7779-77-3		2-Methylpropyl 2-aminobenzoate
7779-78-4	Benzyl isobutyl carbinol; alpha- Isobutylphenethyl alcohol	
7779-80-8	Isobutyl heptylate	2-Methylpropyl heptanoate
7779-81-9	Isobutyl angelate	2-Methylpropyl 2-methylbut-2(cis)-enoate
7779-94-4	Hydroxycitronellal diethyl acetal	
7780-06-5		Isopropyl 3-phenylprop-2-enoate
7783-06-4		
7784-67-0	Ethyl isoeugenyl ether	
7784-98-7		1-(2,6,6-Trimethylcyclohex-3-enyl)pent-1-en-3-one
7785-33-3	Geranyl tiglate	3,7-Dimethyl-2(trans),6-octadienyl 2-methylbut-2(trans)-enoate

CAS	Name	FEMA	CoE	EINECS	Comments
7785-63-9	Pentyl 2-methylisocrotonate			232-083-6	
7785-64-0	Butyl 2-methylbut-2(cis)-enoate			232-084-1	
7786-29-0	2-Methyloctanal	2727	113	232-093-0	
7786-44-9	Nona-2,6-dien-1-ol	2780	589	232-097-2	
7786-47-2	Nonyl isovalerate	2791	447	232-098-8	
7786-48-3	Nonyl octanoate	2790	396	232-099-3	
7786-52-9	Octan-3-on-1-ol	2804	592		
7786-58-5	Octyl isovalerate	2814	446	232-100-7	
7786-61-0	2-Methoxy-4-vinylphenol	2675	177	232-101-2	
7789-92-6	1,1,3-Triethoxypropane		10075	232-193-4	
8000-41-7	Terpineol			232-268-1	
8007-35-0	Terpineol acetate	3047	205	201-265-7	
8554-66-1	Ethyl 3-acetoxy octanoate				
10022-28-3	1,1-Dimethoxyoctane	2798	42	233-018-4	
10024-56-3	Terpinyl cinnamate	3051	330		
10024-57-4	p-Tolyl dodecanoate	3076	378	233-024-7	
10024-64-3	Linalyl octanoate	2644	397	233-026-8	
10031-71-7	1,1-Dimethyl-3-phenylpropyl isobutyrate	2736	2086	233-092-8	
10031-82-0	4-Ethoxybenzaldehyde	2413	626	233-093-3	
10031-86-4	1-Phenylpropyl butyrate	2424	628	233-094-9	
10031-87-5	2-Ethylbutyl acetate	2425	215	233-095-4	
10031-88-6	2-Ethylhept-2-enal	2438	120		
10031-90-0	Ethyl 3(2-furyl)propionate	2435	2091	233-097-5	
10031-92-2	Ethyl 2-nonynoate	2448	480	233-098-0	
10031-93-3	Ethyl 4-phenylbutyrate	2453	307		
10031-96-6	4-Eugenyl formate	2473	355	233-099-6	
10032-00-5	Geranyl acetoacetate	2510	243	233-101-5	
10032-02-7	Geranyl hexanoate	2515	317	233-102-0	
10032-05-0	1,1-Dimethoxyheptane	2541	2015	233-103-6	
10032-08-3	Heptyl cinnamate	2551	2104		
10032-11-8	Hex-3-enyl isovalerate	3498	2344	233-104-1	
10032-13-0	Hexyl isovalerate	3500	10692	233-105-7	
10032-15-2	Hexyl 2-methylbutyrate	3499	4132	233-106-2	
10058-43-2	2-Methyl-1-phenyl-2-propyl formate	2395	353		
10072-05-6	Methyl N,N-dimethylanthranilate			233-202-4	
10094-34-5	1,1-Dimethyl-2-phenethyl butyrate	2394	2084	233-221-8	
10094-36-7	Ethyl cyclohexanepropionate	2431	2095	233-222-3	
10094-40-3	Hex-2-enyl acetate	2564	643	233-223-9	
10094-41-4	Hex-3-enyl 2-methylbutyrate	3497	2345	233-224-4	
10098-89-2	l-Lysine chlorhydrate		11947	233-235-4	(1)
10138-63-3	Phenethyl lactate				
10152-76-8	Allyl methyl sulfide		11429	233-422-0	
10152-77-9	Methyl prop-1-enyl sulfide		11538		
10203-28-8	Dodecan-2-ol		11760	233-500-4	
10208-80-7	alpha-Muurolene		11011		

CAS	Synonyms	Systematic name
7785-63-9	Amyl angelate	Pentyl 2-methylbut-2(cis)-enoate
7785-64-0	Butyl angelate	
7786-29-0	Methylhexylacetaldehyde	
7786-44-9	Nonadienol; Violet leaf alcohol	
7786-47-2		Nonyl3-methylbutanoate
7786-48-3		
7786-52-9		
7786-58-5		Octyl3-methylbutanoate
7786-61-0	Vinyl guaiacol	
7789-92-6	3-Ethoxypropanal diethyl acetal	
8000-41-7		
8007-35-0		
8554-66-1		
10022-28-3	Octanal dimethyl acetal	
10024-56-3		p-Menth-1-en-8-yl cinnamate
10024-57-4		4-Methylphenyl dodecanoate
10024-64-3		1,5-Dimethyl-1-vinylhex-4-enyl octanoate
10031-71-7	Dimethylphenethyl carbinyl isobutyrate; 2-Methyl-4-phenyl-2-butyl isobutyrate	1,1-Dimethyl-3-phenylpropyl 2-methylpropanoate
10031-82-0		
10031-86-4	alpha-Ethylbenzyl butyrate; Ethyl phenyl carbinyl butyrate	
10031-87-5		
10031-88-6		
10031-90-0	Ethyl furylpropionate	
10031-92-2	Ethyl octyne carbonate; Ethyl octyne carboxylate	
10031-93-3		
10031-96-6		4-Allyl-2-methoxyphenyl formate
10032-00-5		3,7-Dimethylocta-2(trans),6-dienyl 3-oxobutanoate
10032-02-7	Geranyl caproate	3,7-Dimethylocta-2(trans),6-dienyl n-hexanoate
10032-05-0	Heptanal dimethyl acetal; Aldehyde C-7 dimethyl acetal; Heptaldehyde dimethylacetal	
10032-08-3		Heptyl 3-phenylprop-2-enoate
10032-11-8		Hex-3-enyl 3-methylbutanoate
10032-13-0		Hexyl 3-methylbutanoate
10032-15-2		
10058-43-2	alpha,alpha- Dimethylphenethyl formate	
10072-05-6		Methyl N,N-dimethyl-2-aminobenzoate
10094-34-5	2-Methyl-1-phenyl-2-propyl butyrate; Benzyl dimethyl carbinyl butyrate; alpha,alpha- dimethylphenethyl butyrate	
10094-36-7	Ethyl 3-cyclohexylpropionate	
10094-40-3	trans-2-Hexenyl acetate; 2-Hexen-1-yl acetate	
10094-41-4		
10098-89-2		
10138-63-3		2-Phenylethyl 2-hydroxypropanoate
10152-76-8		
10152-77-9		
10203-28-8		
10208-80-7		2,8-Dimethylene-5-isopropyl-bicyclo[4.4.0]decane

CAS	Name	FEMA	CoE	EINECS	Comments
10233-13-3	Isopropyl dodecanoate			233-560-1	
10236-16-5	Phytyl acetate			233-565-9	
10236-47-2	Naringin	2769	10286	233-566-4	
10250-45-0	2,6-Dimethyl-4-heptyl acetate			233-588-4	
10276-85-4	Benzyl octanoate			233-620-7	
10316-66-2	2-Hydroxycyclohex-2-en-1-one	3458	11046		
10321-71-8	4-Methylpent-2-enoic acid			233-706-4	
10340-23-5	3-Nonen-1-ol				
10352-87-1	Propyl crotonate			233-768-2	
10352-88-2	trans-2-Heptenoic acid				
10361-39-4	Benzyl valerate		470	233-789-7	
10402-47-8	Geranyl valerate		468	233-869-1	
10415-87-9	3-Methyl-1-phenylpentan-3-ol	2883	86	233-889-0	
10415-88-0	1-Methyl-3-phenylpropyl acetate	2882	671	233-890-6	
10444-50-5	Citral propylene glycol acetal		2343	233-929-7	
10458-14-7	p-Menthan-3-one	2667	2035	233-944-9	
10471-14-4	1-Ethoxy-1-methoxyethane		10039	233-959-0	
10471-96-2	Linalyl valerate		10738	233-961-1	
10482-55-0	Isopentyl 2-methylcrotonate			233-985-2	
10484-36-3	Pentyloxy isoeugenol		10174	233-996-2	
10486-14-3	Rhodinyl phenylacetate	2985	2163	234-003-5	
10486-19-8	Tridecanal		10382	234-004-0	
10519-33-2	Dec-3-en-2-one	3532	11751	234-059-0	
10521-91-2	5-Phenylpentan-1-ol	3618	674	234-064-8	
10521-96-7	Styryl acetate			234-065-3	
10522-18-6	Methyl 2-undecynoate	2751	2111		
10544-63-5	Ethyl crotonate	3486	2244	234-125-9	
10547-84-9	3,4-Dimethyl-5-pentylfuran-2(5H)-one				
10580-25-3	Citronellyl hexanoate			234-175-1	
10588-10-0	Isobutyl valerate		2303	234-191-9	
10599-69-6	2-Methyl-5-propionylfuran		11158	234-215-8	
10599-70-9	3-Acetyl-2,5-dimethylfuran	3391	10921	234-216-3	
10602-34-3	1,1-Diethoxybut-2-ene			234-224-7	
10606-47-0	Hept-3-en-1-ol		10219		
11050-62-7	2-Methyl-3-(2-pentenyl)-2-cyclopenten-1-one	3552		234-273-4	
12124-99-1	Ammonium hydrogen sulphide	2053?	482	235-184-3	(1)
12125-02-9	Ammonium chloride			235-186-4	
12135-76-1	Diammonium sulfide	2053	482		(1)
13002-08-9	Acetaldehyde dipentyl acetal		10032	235-838-8	
13002-09-0	1,1-Di-isopentyloxyethane		10028	235-839-3	
13019-22-2	Dec-9-en-1-ol			235-878-6	
13049-88-2	Non-3-enyl acetate				
13058-12-3	Ethyl 3,7-dimethyl-2,6-octadienoate			235-948-6	
13109-70-1	Bornyl butyrate			236-036-0	
13112-63-5	2-Methyl-1,1-di-isopentyloxypropane		10071		
13162-46-4	Undeca-2,4-dienal	3422	10385		
13171-00-1	4-Acetyl-6-tert-butyl-1,1-dimethylindane	3653		236-114-4	

CAS	Synonyms	Systematic name
10233-13-3	Isopropyl laurate	
10236-16-5		3,7,11,15- Tetramethylhexadec-2-enyl acetate
10236-47-2		
10250-45-0		1-isobutyl-3-methylbutyl acetate
10276-85-4		
10316-66-2	Cyclohexane-1,2-dione	
10321-71-8		
10340-23-5		
10352-87-1		Propyl but-2(trans)-enoate
10352-88-2		
10361-39-4	Benzyl pentanoate	
10402-47-8	Geranyl pentanoate	3,7-Dimethylocta-2(trans),6-dienyl pentanoate
10415-87-9	Phenylethyl methyl ethyl carbinol	
10415-88-0	Methyl phenyl ethyl carbonyl acetate; 4- Phenyl-2-butyl acetate	
10444-50-5		2-(2,6-Dimethylhepta-1,5-dienyl)-4-methyl-1,3-dioxalane
10458-14-7		
10471-14-4	Acetaldehyde ethyl methyl acetal	
10471-96-2	Linalyl pentanoate	1,5-Dimethyl-1-vinylhex-4-enyl pentanoate
10482-55-0		3-Methylbutyl 2-methylbut-2(trans)-enoate
10484-36-3	Amyloxy-isoeugenol; Isoeugenol amyl ether	2-Methoxy-1-pentyloxy-4-prop-1-enyl benzene
10486-14-3	alpha-Citronellyl phenylacetate	3,7-Dimethyloct-7-enyl 2-phenylacetate
10486-19-8		
10519-33-2	Heptylidene acetone	
10521-91-2		
10521-96-7		2-Phenylethenylacetate
10522-18-6	Methyl decene carbonate	
10544-63-5		Ethylbut-2(trans)-enoate
10547-84-9		
10580-25-3		3,7-Dimethyloct-6-enyl hexanoate
10588-10-0	Isobutyl pentanoate	2-Methylpropyl pentanoate
10599-69-6		
10599-70-9		
10602-34-3	2-Butenal diethyl acetal	
10606-47-0		
11050-62-7		
12124-99-1		
12125-02-9		
12135-76-1		
13002-08-9		
13002-09-0	Acetaldehyde di-isoamyl acetal; Acetaldehyde di(3-methylbutyl) acetal	1,1-Di(3-methylbutoxy)ethane
13019-22-2	omega-decenol; Decylenic alcohol	
13049-88-2		
13058-12-3	Ethyl geranate	
13109-70-1		1,7,7-Trimethyl-bicyclo[2.2.1]heptan-2-yl butanoate
13112-63-5		2-Methyl-1,1-di(3-methylbutoxy)propane
13162-46-4		
13171-00-1	Celestolide; 4-Acetyl-1,1-dimethyl-6-tert-butylindan	Acetyl-6-tert-butyl-2,3-dihydro-1,1-dimethylindene

CAS	Name	FEMA	CoE	EINECS	Comments
13184-86-6	Ethyl vanillyl ether			236-136-4	
13201-46-2	2-Methyl-2-butenic acid	3599	10168	236-167-3	
13215-88-8	Megastigma-4,6,8-trien-3-one			236-187-2	
13238-84-1	2,5-Diethylpyrazine		11306		
13246-52-1	Ethyl 2,4-dioxohexanoate	3278	11903	236-228-4	
13254-34-7	2,6-Dimethyl-2-heptanol			236-244-1	
13262-24-3	1,1-Di-isobutoxy-2-methylpropane		10025		
13262-27-6	1,1-Di-isobutoxypentane		10026		
13285-51-3	3-Methyl-1,1-di-isopentyloxybutane		10070		
13327-56-5	Ethyl 3-(methylthio)propionate	3343	11476	236-370-7	
13341-72-5	5,6,7,7a-Tetrahydro-3,6-dimethylbenzofuran-2(4H)-one	3764		236-390-6	
13360-64-0	2-Ethyl-5-methylpyrazine	3154	728	236-416-6	
13360-65-1	3-Ethyl-2,5-dimethylpyrazine	3149	2246	236-417-1	
13416-74-5	Butyl hex-2-enoate				
13419-69-7	Hex-2(trans)-enoic acid	3169	11777	236-528-5	
13442-90-5	1-Ethoxy-1-isopentyloxyethane		10037	236-581-4	
13466-78-9	delta-3-Carene		10983	236-719-3	
13481-87-3	Methyl non-3-enoate	3710		236-786-9	
13494-06-9	3,4-Dimethylcyclopentan-1,2-dione	3268	2234	236-810-8	
13494-07-0	3,5-Dimethylcyclopentan-1,2-dione	3269	2235	236-811-3	
13529-27-6	Furfural diethyl acetal			236-872-6	(2)-(3)
13532-18-8	Methyl 3-(methylthio)propionate	2720	428	236-883-6	
13535-43-8	1,1-Di-(2-methylbutoxy)ethane				
13548-84-0	1-(2-Methylbutoxy)-1-isopentyloxyethane		10068		
13552-96-0	Trideca-2(trans),4(cis),7(cis)-trienal	3638	685	236-936-3	
13553-09-8	Dodeca-3,6-dienal		2121		
13602-09-0	1-Ethoxy-1-(2-methylbutoxy)ethane		10040		
13623-11-5	2,4,5-Trimethylthiazole	3325	11650	237-107-9	
13678-58-5	1-(Methylthio)butan-2-one	3207	11543	237-169-7	
13678-59-6	2-Methyl-5-(methylthio)furan	3366	11550	237-170-2	
13678-60-9	Furfuryl isovalerate	3283	10642	237-171-8	
13678-61-0	Furfuryl 2-methylbutyrate		10643		
13678-67-6	Difurfuryl sulfide	3238	11438	237-172-3	
13678-68-7	S-Furfuryl acetothioate	3162	2250	237-173-9	
13678-73-4	2-Acetyl-1-furfurylpyrrole		11941		
13679-46-4	Furfuryl methyl ether	3159	10944	237-176-5	
13679-60-2	Methyl 5-methylfurfuryl sulfide		11522		
13679-61-3	S-Methyl 2-furanthiocarboxylate	3311	11547	237-177-0	
13679-70-4	5-Methyl-2-thiophenecarbaldehyde	3209	2203	237-178-6	
13679-72-6	2-Acetyl-3-methylthiophene		11590	237-179-1	
13679-75-9	2-Propionylthiophene		11635	237-182-8	
13679-83-9	4-Methyl-2-propionylthiazole		11622		
13679-85-1	4,5-Dihydro-2-methylthiophene-3(2H)-one	3512	11601	237-183-3	
13679-86-2	Anhydrolinalool oxide (5)	3759	11944	237-184-9	
13706-86-0	5-Methylhexan-2,3-dione	3190	11148	237-241-8	

CAS	Synonyms	Systematic name
13184-86-6		Ethyl 4-hydroxy-3-methoxybenzyl ether
13201-46-2		
13215-88-8		4-(2-Butenylidene)-3,5,5-trimethylcyclohex-2-ene-1-one
13238-84-1		
13246-52-1	Ethyl propionylpyruvate	
13254-34-7		
13262-24-3	Isobutanaldi-isobutyl acetal; 2-Methylpropanal diisobutyl acetal	1,1-Di(2-methylpropoxy)-2-methylpropane
13262-27-6	Valeraldehyde di-isobutyl acetal; Pentanal diisobutyl acetal	1,1-Di(2-methylpropoxy)pentane
13285-51-3	Isovaleraldehyde di-isoamyl acetal; 3-Methylbutanal di(3-methylbutyl) acetal	3-Methyl-1,1-di(3-methylbutoxy)butane
13327-56-5		
13341-72-5	Mint lactone	
13360-64-0	2-Methyl-5-ethyl pyrazine	
13360-65-1		
13416-74-5		
13419-69-7		
13442-90-5	Acetaldehyde ethyl 3-methylbutyl acetal	1-Ethoxy-1-(3-methylbutoxy)ethane
13466-78-9	3- Carene; Isodiprene	3,7,7-trimethyl-bicyclo-[4.1.0] hept-3-ene
13481-87-3		
13494-06-9		
13494-07-0		
13529-27-6		
13532-18-8		
13535-43-8	Acetaldehyde di(2-methylbutyl) acetal	
13548-84-0	Methylbutyl acetal	1-(2-Methylbutoxy)-1-(3-methylbutoxy)ethane
13552-96-0		
13553-09-8		
13602-09-0	Acetaldehyde ethyl 2-methylbutyl acetal	
13623-11-5		
13678-58-5		
13678-59-6	Methyl 5-methyl-2-furyl sulfide; (5-Methylfuryl-2)-thiomethane	
13678-60-9		Furfuryl 3-methylbutanoate
13678-61-0		
13678-67-6	2,2'- (Thiodimethylene)-difuran	
13678-68-7	Furfuryl thioacetate	
13678-73-4		
13679-46-4		
13679-60-2		
13679-61-3	Furoylthiomethane; Methyl 2-thiofuroate	
13679-70-4	2- Formyl-5-methylthiophen; 2-Thiophene carboxaldehyde, 5-methyl	
13679-72-6		
13679-75-9	2- Propanoylthiophene	
13679-83-9		
13679-85-1	2-Methyltetrathiophen-3-one	
13679-86-2		2-(1-Methylene-ethyl)-5-methyl-5-vinyltetrahydrofuran
13706-86-0	Acetyl isovaleryl	

CAS	Name	FEMA	CoE	EINECS	Comments
13708-12-8	5-Methylquinoxaline	3203	2271	237-246-5	
13744-15-5	beta-Cubebene		10989		
13794-15-5	Sodium 2-(4-methoxyphenoxy)propionate	3773			
13851-11-1	Fenchyl acetate	3390	11769	237-588-5	
13877-91-3	beta-Ocimene	3539	11015	237-641-2	
13925-00-3	Ethylpyrazine	3281	2213	237-691-5	
13925-03-6	2-Ethyl-6-methylpyrazine		11331	237-692-0	
13925-05-8	2-Isopropyl-5-methylpyrazine	3554	2268		
13925-06-9	2-Isobutyl-3-methylpyrazine	3133		237-693-6	
13925-07-0	2-Ethyl-3,5-dimethylpyrazine	3150	2245	237-694-1	
13952-84-6	sec-Butylamine		707	237-732-7	
13991-37-2	Pent-2-enoic acid		10163	237-791-9	
14059-92-8	4-Ethyl-2,6-dimethoxyphenol	3671	11231		
14073-97-3	(2S-trans)-5Methyl-2-(1-methylethyl)cyclohexanone	2667	2035	237-926-1	
14159-61-6	3-Isobutylpyridine	3371	11396		
14173-25-2	Methyl phenyl disulfide		11532		
14252-42-7	1,1-bis(Ethylthio)-ethane				
14309-57-0	Non-3-en-2-one		11163		
14360-50-0	2-Hexanoylfuran	3418	11180		
14400-67-0	2,5-Dimethylfuran-3(2H)-one		11066		
14436-32-9	Dec-9-enoic acid	3660	10090		
14481-52-8	alpha-Terpinyol anthranilate	3048	259		
14576-08-0	alpha-Terpinyol methyl ether				
14667-55-1	2,3,5-Trimethylpyrazine	3244	735		
14765-30-1	2-(sec-Butyl)cyclohexanone	3261	11044		
14901-07-6	beta-Ionone	2595	142		
15111-96-3	p-Mentha-1,8-dien-7-yl acetate	3561	10742	239-162-4	
15111-97-4	p-Mentha-1,8(10)-dien-9-yl acetate		10743	239-164-5	
15186-51-3	3-Methyl-2(3-methylbut-2-enyl)furan				
15469-77-9	Dec-3-enoic acid		10088	239-489-2	
15679-09-1	2-Ethylthiazole			239-755-8	
15679-12-6	2-Ethyl 4-methylthiazole	3680	11612	239-757-9	
15679-13-7	2-Isopropyl-4-methylthiazole	3555		239-758-4	
15679-19-3	2-Ethoxythiazole	3340	11611	239-760-5	
15706-73-7	Butyl 2-methylbutyrate	3393	10534	239-798-2	
15707-23-0	2-Ethyl-3-methylpyrazine	3155	548	239-799-8	
15707-24-1	2,3-Diethylpyrazine	3136	534	239-800-1	
15729-76-7	2,5-Diethylthiazole			239-823-7	
15764-16-6	2,4-Dimethylbenzaldehyde	3427		239-856-7	
15986-80-8	2-Methyl-3-propylpyrazine			240-121-8	
15987-00-5	2-Butyl-3-methylpyrazine			240-126-5	
16128-68-0	Butane-1,2-dithiol	3528	11909	240-290-8	
16356-11-9	Undeca-1,3,5-triene	3795		240-416-1	
16400-72-9	Dodec-2-eno-1,5-lactone	3802		240-453-3	
16409-43-1	2-(2-Methylprop-1-enyl)-4-methyltetrahydropyran	3236	2269	240-457-5	
16409-45-3	Menthyl acetate	2668	206	240-459-6	(4)

CAS	Synonyms	Systematic name
13708-12-8		
13744-15-5		10-Methyl-4-methylene-7-isopropyl-tricyclo[4.4.0.0(1.5)]decane
13794-15-5		
13851-11-1	1,3,3-Trimethyl-2-norbornanyl acetate	1,3,3-trimethyl-bicyclo[2.2.1]heptan-2-yl acetate
13877-91-3		3,7-Dimethylocta-1,3(trans),6-triene
13925-00-3	2-Ethyl pyrazine; 2-Ethyl-1,4-diazine	
13925-03-6		
13925-05-8	5- Isopropyl-2-methylpyrazine	
13925-06-9		2-(2-Methylpropyl)-3-methylpyrazine
13925-07-0		
13952-84-6	But-2-ylamine	1-Methylpropylamine
13991-37-2		
14059-92-8		
14073-97-3		
14159-61-6		3-(2-Methylpropyl)pyridine
14173-25-2		
14252-42-7	Acetaldehyde diethyl mercaptal	
14309-57-0		
14360-50-0	Pentyl 2-furyl ketone	
14400-67-0		
14436-32-9		
14481-52-8		p-Menth-1-en-8-yl 2-aminobenzoate
14576-08-0		p-Menth-1-en-8-yl methyl ether
14667-55-1		
14765-30-1	2-But-2-ylcyclohexanone	2-(1-Methylpropyl)cyclohexanone
14901-07-6		4-(2,6,6-Trimethylcyclohex-1-enyl)but-3-en-2-one
15111-96-3	Perilla acetate; Perrilyl acetate	
15111-97-4	Limonen-9-yl acetate	
15186-51-3		
15469-77-9		
15679-09-1		
15679-12-6		
15679-13-7		
15679-19-3		
15706-73-7		
15707-23-0		
15707-24-1		
15729-76-7		
15764-16-6		
15986-80-8		
15987-00-5		
16128-68-0		
16356-11-9		
16400-72-9	5-Hydroxy-2-dodecenoic acid lactone; Delta-2-dodecenolactone; 6-Heptyl-5,6-dihydro-2-pyrone; 5-Heptyl-2-pentene-5-olide	
16409-43-1	Rose oxide; Tetrahydro-4-methyl-2-(2-methylpropen-1-yl)pyran; Rose oxide levo	
16409-45-3		2-Isopropyl-5-methylcyclohexanyl acetate

CAS	Name	FEMA	CoE	EINECS	Comments
16409-46-4	Menthyl isovalerate	2669	450	240-460-1	
16429-21-3	Dodecano-1,6-lactone	3610		240-483-7	
16491-36-4	Hex-3-enyl butyrate	3402	11859	240-553-7	
16491-54-6	Oct-1-en-3-yl butyrate	3612		240-555-8	
16493-80-4	4-Ethyl octanoic acid	3800		240-560-5	
16630-52-7	3-(Methylthio)butanal	3374	11687	240-678-7	
16630-55-0	3-(Methylthio)propyl acetate			240-679-2	
16630-60-7	3-(Methylthio)propyl butyrate			240-680-8	
16630-65-2	3-(Methylthio)butyric acid			240-682-9	
16630-66-3	Methyl (methylthio)acetate		11525	240-683-4	
16930-96-4	Hexyl crotonate	3354	10688	240-997-1	
16939-73-4	Hept-2-enyl acetate		10661	241-002-3	
16957-70-3	2-Methyl-2-pentenoic acid	3195	11680	241-026-4	
17042-24-9	2-Mercaptopentan-3-one				
17092-92-1	Dihydroactinidiolide		10931		
17283-81-7	Dihydro-beta-ionone	3626	11060	241-318-1	
17369-59-4	3-Propylidene phthalide	2952	494	241-402-8	
17369-60-7	Tetramethyl ethylcyclohexenone (mixture of isomers)	3061	168	241-403-3	
17373-84-1	Butyl ethyl malonate	2195	384		
17373-89-6	2-Hexylidene cyclopentan-1-one	2573	167	241-411-7	
17373-93-2	2-Methylbenzyl acetate	3702		241-412-2	
17488-65-2	4-Phenylbut-3-en-2-ol	2880	2032	241-501-6	
17587-33-6	Nona-2(trans),6(trans)-dienal	3766		241-557-1	
17600-72-5	1-Ethoxy-2-methoxybenzene			241-571-8	
17619-36-2	Methyl propyl trisulfide	3308	586	241-594-3	
17626-75-4	2-Propylthiazole			241-606-7	
17627-44-0	Bisabola-1,8,12-triene			241-610-9	
17909-77-2	alpha-Sinensal	3141	10380	241-854-6	
17916-91-5	p-1-Menthenyl-9-acetate	3566	10748		
18138-03-9	Propylpyrazine		11362	242-023-0	
18138-04-0	2,3-Diethyl-5-methylpyrazine	3336	11303	242-024-6	
18138-05-1	3,5-Diethyl-2-methylpyrazine		11305		
18277-27-5	2-(sec-Butyl)thiazole	3372	11598	242-154-3	
18318-83-7	Dimethoxyhex-2(trans)-ene			242-204-4	
18358-53-7	Isopinocampone		11125	242-228-5	
18362-97-5	Isopropyl valerate			242-235-3	
18368-91-7	2-Ethylfenchol	3491	10208	242-243-7	
18368-95-1	p-Mentha-1,3,8-triene				
18383-49-8	Carvone-5,6-oxide		10501		
18409-21-7	Deca-2,4-dien-1-ol		11748	242-291-9	
18449-60-0	sec-Butyl lactate			242-334-1	
18479-58-8	2,6-Dimethyloct-7-en-2-ol				
18492-65-4	1,1-Diethoxyhept-4-ene (cis and trans)	3349	10011	242-376-0	
18604-50-7	2-Methoxy-4-(2-propenyl)phenyl-beta-D-glucopyranoside				

CAS	Synonyms	Systematic name
16409-46-4		2-Isopropyl-5-methylcyclohexanyl acetate 3-methylbutanoate
16429-21-3	epsilon- Dodecalactone	
16491-36-4		
16491-54-6		1-Vinylhexyl butyrate
16493-80-4		
16630-52-7	3-Methyl thio butyraldehyde; 3-Methyl propanethiol; Thio isoamyl aldehyde; Thio isovaleraldehyde; 3-Methylthio butanal	
16630-55-0		
16630-60-7		
16630-65-2		
16630-66-3		
16930-96-4		Hexyl but-2(trans)-enoate
16939-73-4		
16957-70-3		
17042-24-9		
17092-92-1		2,2,6-Trimethyl-7-oxa-bicyclo[4.3.0]non-9-ene
17283-81-7		4-(2,6,6-Trimethylcyclohex-1-enyl)butan-2-one
17369-59-4		
17369-60-7		
17373-84-1		Butyl ethyl propanedioate
17373-89-6	alpha- Hexylidene cyclopentanone	
17373-93-2		
17488-65-2	Methyl styryl carbinol; alpha- Methylcinnamyl alcohol	
17587-33-6		
17600-72-5	Ethyl guaiacol	
17619-36-2	Propyl methyl trisulfide; Methyl trithio propane	
17626-75-4		
17627-44-0	alpha Bisabolene	6-Methyl-2-(4-methylcyclohex-3-enyl)hepta-2,5-diene
17909-77-2		2,6-Dimethyl-10-methylene dodeca-2,6,11-trienal
17916-91-5		
18138-03-9		
18138-04-0		
18138-05-1	2,6- Diethyl-3-methylpyrazine	
18277-27-5	2-But-2-ylthiazole	2-(1-Methylpropyl)thiazole
18318-83-7	trans-2-Hexenal dimethyl acetal	
18358-53-7		2,6,6-Trimethyl-bicyclo[3.1.1] cycloheptan-3-one
18362-97-5	Isopropyl pentanoate	
18368-91-7	2-Ethyl-1,3,3-trimethyl-2-norbornanol	2-Ethyl-1,3,3-trimethyl-bicyclo[2.2.1]heptan-2-ol
18368-95-1		
18383-49-8		5,6-Epoxy-p-menth-8-en-2-one
18409-21-7		
18449-60-0		1-Methylpropyl 2-hydroxypropanoate
18479-58-8	Dihydromyrcenol	
18492-65-4	4-Heptenal diethyl acetal	
18604-50-7		

CAS	Name	FEMA	CoE	EINECS	Comments
18640-74-9	2-Isobutylthiazole	3134	11618	242-470-1	
18675-34-8	neo-Dihydrocarveol		2296		
18675-35-9	Isodihydrocarveol				
18679-18-0	Dodec-6-eno-1,4-lactone	3780	625	242-497-9	
18721-61-4	3-(Ethylthio)propan-1-ol			242-534-9	
18794-77-9	2-Hexylthiophene		11616	242-579-4	
18794-84-8	beta-Farnesene		10999	242-582-0	
18829-55-5	Hept-2(trans)-enal	3165	730	242-608-0	
18829-56-6	trans-2-Nonenal	3213	733	242-609-6	
18951-85-4	3,7-Dimethyloctadienoic acid				
18999-28-5	Hept-2-enoic acid		10102	242-738-8	
19009-56-4	2-Methyldecanal			242-745-6	
19089-92-0	Hexyl-2-butenolate	3354	10688	242-808-8	
19224-26-1	Propylene glycol dibenzoate	3419	10890	242-894-7	
19269-28-4	3-Methylhexanal				
19317-11-4	Farnesal			242-957-9	
19322-27-1	4-Hydroxy-5-methylfuran-3(2H)-one	3635	11785	242-961-0	
19329-89-6	Isopentyl lactate		10720	242-966-8	
19342-01-9	N,N-Dimethylphenethylamine			242-976-2	
19519-45-0	4,5-Dimethyl-2-isopropylloxazole				
19700-21-1	Geosmin		10216	243-239-8	
19788-49-9	Ethyl 2-mercaptopropionate	3279	11469	243-314-5	
19872-52-7	2-Methyl-4-oxopentane-2-thiol		11500	243-386-8	
19961-52-5	5-Ethyl-2-methylthiazole				
20013-73-4	2,6,6-Trimethylcyclohex-2-en-1-one			243-465-7	
20125-84-2	Oct-3-en-1-ol	3467	10296	243-533-6	
20273-24-9	Pent-2-en-1-ol		665		
20279-51-0	Hexyl lactate			243-676-4	
20290-84-0	Hexyl 9-octadecenoate				
20307-84-0	delta-Elementene		10996		
20333-39-5	Methyl ethyl disulfide		11470		
20407-84-5	Dodec-2(trans)-enal	2402	124		
20474-93-5	Allyl crotonate		2222	243-845-2	
20483-36-7	3,4-Dehydrodihydro-beta-ionone	3447	11057	243-847-3	
20487-40-5	1,1-Dimethylethyl propionate				
20489-53-6	1,10-Dihydronootkatone	3776			
20582-85-8	4-(Methylthio)butan-1-ol	3600			
20662-84-4	Trimethyloxazole		11424	243-952-4	
20665-85-4	Vanillin isobutyrate	3754		243-956-6	
20675-95-0	2,6-Dimethoxy-4-prop-1-enylphenol	3728			
20680-10-8	1-Ethoxy-1-propoxyethane		10050	243-963-4	
20702-77-6	Neohesperidine dihydrochalcone	3811		243-978-6	(4)
20752-34-5	neoMenthol	2666	2028		
20756-86-9	S-Methyl hexanethioate		11515		
20777-49-5	Dihydrocarvyl acetate	2380	2064	244-029-9	
20777-49-5	neoDihydrocarvyl acetate		10859	244-029-9	

CAS	Synonyms	Systematic name
18640-74-9		2-(2-Methylpropyl)thiazole
18675-34-8		p-Menth-8-en-2-ol
18675-35-9		iso-p-Menth-8-en-2-ol
18679-18-0	gamma-Dodecen-6-lactone; 4-Hydroxy-6-dodecenoic acid lactone; Dihydro-5(2-octenyl)-2(3H)-furanone	
18721-61-4		
18794-77-9		
18794-84-8		7,11-Dimethyl-3-methylene-1,6,10-dodecatriene
18829-55-5	(E)-2-hepten-1-al; 2-Heptenal; beta-Butyl acrolein; trans-hept-2-en-1-al	
18829-56-6		
18951-85-4		
18999-28-5		
19009-56-4		
19089-92-0		
19224-26-1		Propan-1,2-diyl dibenzoate
19269-28-4		
19317-11-4		3,7,11-Trimethyldodeca-2,6,10-trien-1-one
19322-27-1	2,3-Dihydro-4-hydroxy-5-methylfuran-3-one	
19329-89-6		3-Methylbutyl 2-hydroxypropanoate
19342-01-9		
19519-45-0		
19700-21-1	Decahydronaphthalene	2,6-Dimethyl-bicyclo[4.4.0]decan-1-ol
19788-49-9	Ethyl thiolactate	
19872-52-7	4-Mercapto-4-methylpentan-2-one	
19961-52-5		
20013-73-4		
20125-84-2		
20273-24-9		
20279-51-0		Hexyl 2-hydroxypropanoate
20290-84-0		
20307-84-0		3-Isopropenyl-1-isopropyl-4-methyl-4-vinylcyclohex-1-ene
20333-39-5		
20407-84-5		
20474-93-5		Allyl but-2(trans)-enoate
20483-36-7	Dehydrodihydroionone	4-(2,6,6-Trimethyl-1,3-cyclohexadienyl)butan-2-one
20487-40-5	tertButyl propionate	
20489-53-6		
20582-85-8		
20662-84-4		
20665-85-4		4-Formyl-2-methoxyphenyl 2-methylpropanoate
20675-95-0	4-Propenylsyringol	
20680-10-8	Acetaldehyde ethyl propyl acetal	
20702-77-6		
20752-34-5		
20756-86-9		
20777-49-5	6-Methyl-3-(1-methylvinyl)cyclohexyl acetate; Dihydrocarveyl acetate	p-Menth-8-en-2-yl acetate
20777-49-5		p-Menth-8(9)-en-2-yl acetate

CAS	Name	FEMA	CoE	EINECS	Comments
20780-49-8	3,7-Dimethyloctyl acetate		10899	244-034-6	
20920-83-6	2-(Ethoxymethyl)phenol	3485	11905		
21016-46-6	2,4-Dimethylpent-2-enoic acid	3143	744		
21063-71-8	Methyl oct-4(cis)-enoate	3367	10834	244-188-4	
21188-58-9	Methyl 3-hydroxyhexanoate	3508	10812	244-261-0	
21188-61-4	Ethyl 3-acetohexanoate		10566	244-263-1	
21368-68-3	Camphor	2230	140	207-355-2	
21653-20-3	Thujyl alcohol			244-504-0	
21662-09-9	Dec-4(cis)-enal	3264	2297	244-514-5	
21662-13-5	Dodeca-2,6-dienal	3637		244-515-0	
21662-16-8	Dodeca-2,4-dienal	3670	11758	244-517-1	
21722-83-8	2-Cyclohexylethyl acetate	2348	218		
21834-92-4	5-Methyl-2-phenylhex-2-enal	3199	10365	244-602-3	
21835-00-7	2-Hydroxy-3,4-dimethyl-2-cyclopenten-1-one			244-604-4	
21835-01-8	3-Ethylcyclopentan-1,2-dione	3152	759	244-606-5	
21884-26-4	iso-Propyl 4-oxopentanoate			244-630-6	
21948-70-9	Pyrazinyl methyl sulfide	3231	2288	244-675-1	
21963-26-8	Non-2-eno-1,4-lactone			244-685-6	
21964-44-3	Non-1-en-3-ol		10291	244-686-1	
22014-48-8	Ethyl 4-(methylthio)butyrate	3681		244-720-5	
22029-76-1	4-(2,2,6-Trimethyl-1-cyclohexenyl)but-3-en-2-ol	3625		244-735-7	
22030-19-9	4-(2,2,6-Trimethyl-1-cyclohexenyl)-3-buten-2-yl acetate			244-736-2	
22047-25-2	Acetylpyrazine	3126	2286	244-753-5	
22047-26-3	2-Acetyl-6-methylpyrazine		11298		
22047-27-4	2-Acetyl-5-methylpyrazine		11297		
22094-00-4	Prenyl ethyl ether	3777			
22104-78-5	Oct-2-en-1-ol		11804		
22104-80-9	Dec-2-en-1-ol		11750	244-784-4	
22694-96-8	2,4,5-Trimethyl-delta-3-oxazoline	3525	2319		
22940-86-9	2-Acetyl-3,5-dimethylfuran				
23267-57-4	beta-Ionone epoxide		11202	245-542-0	
23328-62-3	2-Methylthioacetaldehyde	3206	11686	245-587-6	
23433-05-8	Octane-1,3-diol				
23511-70-8	2-Phenoxyethyl butyrate			245-705-6	
23550-40-5	4-(Methylthio)-4-methylpentan-2-one	3376	11551	245-727-6	
23654-92-4	3,5-Dimethyl-1,2,4-trithiolane	3541	11883	245-808-6	
23696-85-7	beta-Damascenone	3420	11197	245-833-2	
23726-91-2	trans-1-(2,6,6-Trimethyl-1-cyclohexen-1-yl)but-2-en-1-one	3243	2340	245-842-1	
23726-92-3	beta-Damascene	3243	2340	245-843-7	
23726-94-5	cis-1-(2,6,6-Trimethyl-2-cyclohexen-1-yl)but-2-en-1-one	3659	11053	245-845-8	
23747-43-5	Ethyl 2-(methylthio)propionate		11471	245-862-0	
23747-45-7	S-Methyl isopentanethioate		11506	245-863-6	
23747-48-0	6,7-Dihydro-5-methyl-5H-cyclopentapyrazine	3306	2314	245-864-1	
23787-80-6	2-Acetyl-3-methylpyrazine		11296	245-889-8	
23832-18-0	2-Mercaptopinane	3503	2332	245-900-6	

CAS	Synonyms	Systematic name
20780-49-8	Tetrahydrogeranyl acetate	
20920-83-6		
21016-46-6		
21063-71-8		
21188-58-9		
21188-61-4		
21368-68-3		
21653-20-3		1-Isopropyl-4-methylbicyclo[3.1.0]hexan-3-ol
21662-09-9		
21662-13-5		
21662-16-8		
21722-83-8	Cyclohexane ethyl acetate; Ethylcyclohexyl acetate; Hexahydrophenyl ethyl acetate	
21834-92-4		
21835-00-7		
21835-01-8	2-Hydroxy-3-ethyl-2-cyclopenten-1-one; Ethyl cyclopentenolone; Ethyl cyclopentalone	
21884-26-4		
21948-70-9		(Methylthio)pyrazine
21963-26-8		
21964-44-3		
22014-48-8		
22029-76-1	beta-Ionol	
22030-19-9		
22047-25-2	2-Acetylpyrazine	
22047-26-3		
22047-27-4		
22094-00-4	Ethyl 3-methylbut-2-enyl ether	1-Ethoxy-3-methylbut-2-ene
22104-78-5		
22104-80-9		
22694-96-8		
22940-86-9		
23267-57-4		4-(1,2-Epoxy-2,6,6-trimethylcyclohexyl)but-3-en-2-one
23328-62-3	Methyl mercapto aldehyde	
23433-05-8		
23511-70-8		
23550-40-5		
23654-92-4		
23696-85-7		1-(2,6,6-Trimethylcyclohexa-1,3-dienyl)but-2-en-1-one
23726-91-2		
23726-92-3		1-(2,6,6-Trimethylcyclohex-1-enyl)but-2-en-1-one
23726-94-5		
23747-43-5	Ethyl alpha-(methylthio)propionate	
23747-45-7	Methane thioisopentanoate	S-Methyl 3-methylbutanethioate
23747-48-0		
23787-80-6		
23832-18-0		2,6,6 Trimethyl-bicyclo[3.1.1]heptane-2-thiol

CAS	Name	FEMA	CoE	EINECS	Comments
23986-74-5	Germacre-1(10),4(14),5-triene				
24050-10-0	2-Propylthiazolidine				
24050-16-6	2-Methylthiazolidine				
24168-70-5	2-(sec-Butyl)-3-methoxypyrazine	3433	11300	246-050-9	
24295-03-2	2-Acetylthiazole	3328	11726	246-134-5	
24323-24-8	4-Methyldecanoic acid				
24330-52-7	Butane-1,3-dithiol	3529	11910	246-172-2	
24401-36-3	2-Phenylpent-4-enal	3519	10377	246-224-4	
24415-26-7	1-Nonene-3-one				
24653-75-6	1-Mercaptopropan-2-one				
24683-00-9	2-Isobutyl-3-methoxypyrazine	3132	11338	246-402-1	
24717-85-9	Citronellyl 2-methylbut-2-enoate			246-426-2	
24720-09-0	trans-1-(2,6,6-Trimethyl-2-cyclohexen-1-yl)but-2-en-1-one			246-430-4	
24817-51-4	Phenethyl 2-methylbutyrate	3632	10883	246-476-5	
24851-98-7	Methyl 3-oxo-2-pentyl-1-cyclopentylacetate	3408	10785	246-495-9	
25007-53-8	Ethyl 4-hydroxy-3-methoxybenzyl ether			236-136-4	
25103-58-6	2,4,4,6,6-Pentamethylheptane-2-thiol			246-619-1	
25152-84-5	Deca-2(trans),4(trans)-dienal	3135	2120	246-668-9	
25152-85-6	Hex-3-enyl benzoate	3688	11778	246-669-4	
25224-14-0	3-(sec-Butyl)pyridine				
25263-97-2	Isobutyl tetradecanoate		10712	246-765-6	
25312-34-9	4-(2,6,6-Trimethyl-2-cyclohexenyl)but-3-en-2-ol	3624		246-815-7	
25409-08-9	2-Butylbut-2-enal	3392	10324	246-950-1	
25409-39-6	Acetolactic acid ethylester acetate			246-951-7	
25415-62-7	Pentyl isovalerate		2224	246-954-3	
25415-77-4	Isopentyl but-2-enoate			246-958-5	
25524-95-2	Dec-7-eno-1,5-lactone	3745		247-074-2	
25680-57-3	2-Methoxy-3-propylpyrazine				
25680-58-4	2-Ethyl-3-methoxypyrazine	3280	11329	247-184-0	
25773-40-4	2-Isopropyl-3-methoxypyrazine	3358	11344	247-256-1	
25905-14-0	Lavandulyl acetate			247-327-7	
26171-78-8	Menthyl phenylacetate			247-498-8	
26303-90-2	Dec-4-enoic acid		10089	247-599-7	
26446-31-1	Glyceryl 5-hydroxydecanoate	3685	10648	247-699-0	
26446-32-2	Glyceryl 5-hydroxydodecanoate	3686	10649	247-700-4	
26450-58-8	1,1-Dimethoxypentane			247-716-1	
26473-47-2	3-Mercapto-2-methylpropionic acid			247-726-6	
26486-13-5	4,5-Dihydro-3-mercapto-2-methylfuran				
26486-14-6	4,5-Dihydro-2-methyl-3-thioacetylfuran	3636		247-731-3	
26494-10-0	4-Hydroxy-2,5-dimethylthiophen-3(2H)-one			247-742-3	
26549-24-6	2-Hexanol				
26553-47-9	Ethyl oct-3(trans)-enoate			247-799-4	
26643-91-4	4-Methyl-2-phenylpent-2-enal	3200	10366	247-869-4	
27043-05-6	2,5-Dimethyl-3-ethylpyrazine	3149	727	248-182-2	
27113-22-0	5-Paradol			248-208-1	
27300-27-2	2-Acetyl-1,4,5,6-tetrahydropyridine				
27372-03-8	Ethyl 2-hydroxy-3-methylbutyrate		10600		

CAS	Synonyms	Systematic name
23986-74-5	Germacrene D	3-Isopropyl-6-methyl-10-methylenecyclodeca-1,6-diene
24050-10-0		
24050-16-6		
24168-70-5	2-But-2-yl-3-methoxypyrazine, 2-Methoxy-3-(1-methylpropyl)-cyclohexanone	2-(1-Methylpropyl)-3-methoxypyrazine
24295-03-2	Methyl-2-thiazoyl ketone	
24323-24-8		
24330-52-7		
24401-36-3		
24415-26-7		
24653-75-6	Mercaptoacetone	
24683-00-9		
24717-85-9		3,7-Dimethyloct-6-enyl 2-methylbutanoate
24720-09-0		
24817-51-4	Benzylcarbonyl 2-methylbutyrate	
24851-98-7	Methyl dihydrojasmonate; Hedione	
25007-53-8		
25103-58-6		
25152-84-5	2,4-Decadienal; Deca-2,4-dienal; Heptenyl acrolein	
25152-85-6		
25224-14-0	3-But-2-ylpyridine	3-(1-Methylpropyl)pyridine
25263-97-2	Isobutylmyristate	2-Methylpropyl tetradecanoate
25312-34-9	alpha-Ionol	
25409-08-9	2-Ethylidenehexanal	
25409-39-6		Ethyl 2-acetoxy-4-oxopentanoate
25415-62-7	Amyl isopentanoate; Pentyl 3-methylbutyrate	Pentyl 3-methylbutanoate
25415-77-4	Isoamyl 2-butenate	3-Methylbutyl but-2-enoate
25524-95-2		
25680-57-3		
25680-58-4		
25773-40-4		
25905-14-0		5-Methyl-2-(1-methylethyl)hex-4-enyl acetate
26171-78-8	(-)-Menthyl phenylacetate	
26303-90-2		
26446-31-1		
26446-32-2		
26450-58-8	Pentanal dimethyl acetal	
26473-47-2	3-Mercaptoisobutyric acid	
26486-13-5		
26486-14-6		
26494-10-0		
26549-24-6		
26553-47-9		
26643-91-4		
27043-05-6		
27113-22-0		
27300-27-2		
27372-03-8		

CAS	Name	FEMA	CoE	EINECS	Comments
27538-09-6	2-Ethyl-4-hydroxy-5-methyl-3(2H)-furanone	3623		248-513-0	
27538-10-9	2-Ethyl-5-methyl-3(2H)-furanone				
27593-23-3	6-Pentyl-2H-pyran-2-one	3696	10967	248-552-3	
27625-35-0	Isopentyl 2-methylbutyrate	3505	10721	248-581-1	
27829-72-7	Ethyl trans-2-hexenoate	3675	631	248-681-5	
27871-49-4	Methyl lactate			248-704-9	
28069-72-9	trans-2, cis-6-Nonadien-1-ol	2780	589	248-816-8	
28069-74-1	1-Ethoxy-1-(3-hexenyloxy)ethane	3775	10034	248-817-3	
28163-84-0	trans-3-Heptenoic acid				
28217-92-7	Cyclohexylmethylpyrazine	3631		248-905-1	
28231-03-0	Cedrenol		10189	248-917-7	
28267-32-5	Isopropyl nonanoate			248-932-9	
28290-90-6	Ethyl dodec-2-enoate		10584		
28316-62-3	Propyl deca-2,4-dienoate	3648	10889	248-960-1	
28343-22-8	2,6-Dimethoxy-4-vinylphenol		11229		
28369-24-6	Butyl deca-2,4-dienoate		10529	248-994-7	
28588-73-0	bis-(2,5-Dimethyl-3-furyl) disulfide	3476	722	249-093-1	
28588-74-1	2-Methylfuran-3-thiol	3188	11678	249-094-7	
28588-75-2	bis-(2-Methyl-3-furyl) disulfide	3259	723	249-095-2	
28588-76-3	bis-(2-Methyl-3-furyl) tetrasulfide	3260	724		
28631-86-9	2,4-Dihydroxyacetophenone	3662	11884		
28645-51-4	Hexadec-9-en-1,16 lactone				
28664-35-9	3-Hydroxy-4,5-dimethylfuran-2(5H)-one	3634	11834	249-136-4	
28839-13-6	p-Menth-1-en-9-yl acetate	3566	10748	249-266-1	
29021-36-1	Myrtanyl acetate			249-371-2	
29066-34-0	(+/-)-(1a,2b,5a)-5-Methyl-2-(1-methylethyl)cyclohexanol acetate	2668	206	249-409-8	
29350-73-0	delta-Cadinene		10982	249-580-9	
29414-56-0	2,6-Dimethylocta-1,5,7-trien-3-ol			249-613-7	
29460-90-0	Isopropylpyrazine		11343	249-646-7	
29548-14-9	p-Menth-1-en-9-al	3178	10347	249-688-6	
29548-30-9	3,7,11-Trimethyldodeca-2,6,10-trienyl acetate			249-689-1	
29606-79-9	Isopulegone	2964	2051	249-725-6	
29811-50-5	Octyl 2-methylbutyrate	3604	10866	249-872-6	
29895-73-6	Phenylacetaldehyde glyceryl acetal	2877	41	249-934-2	
29901-85-7	Hept-3-enoic acid		10103	249-943-1	
29926-41-8	2-Acetyl-2-thiazoline		2335		
29957-43-5	3,7-Dimethylocta-1,5,7-trien-3-ol		10202	249-975-6	
30304-82-6	Menthol 1-and 2-propylene glycol carbonate	3806			
30361-28-5	Octa-2(trans),4(trans)-dienal	3721	11805	250-147-1	
30361-29-6	trans-2, trans-4-Undecadienal	3422	10385	250-148-7	
30364-38-6	1,2-Dihydro-1,1,6-trimethylnaphthalene			250-150-8	
30385-25-2	Dihydromyrcenol			258-432-2	
30390-50-2	4-Decenal	3264	2297		

CAS	Synonyms	Systematic name
27538-09-6		
27538-10-9		
27593-23-3	6- Pentyl-alpha-pyrone	
27625-35-0		3-Methylbutyl 2-methylbutanoate
27829-72-7		
27871-49-4		Methyl 2-hydroxypropanoate
28069-72-9		
28069-74-1	Ethyl cis-3-hexenyl acetal; Acetaldehyde ethyl 3-hexenyl acetal	
28163-84-0		
28217-92-7		
28231-03-0		2,6,6-Trimethyl-tricyclo[5.3.1.0(1.5)]undec-8-en-8-yl methanol
28267-32-5	Isopropyl pelargonate	
28290-90-6		
28316-62-3		
28343-22-8		
28369-24-6		
28588-73-0		
28588-74-1		
28588-75-2		
28588-76-3		
28631-86-9		
28645-51-4		Oxacyclo heptadec-10-en-2-one
28664-35-9	2-Hydroxy-3-methylpent-2-en-1,4-lactone	
28839-13-6		
29021-36-1		(6,6-dimethyl-bicyclo[3.1.1]heptan-2-yl)methyl acetate
29066-34-0		
29350-73-0		2,3,4,7,8,10-hexahydro-1,6-dimethyl-4-isopropyl-naphthalene
29414-56-0	Notrienol	
29460-90-0		(2-Methylpropyl)pyrazine
29548-14-9	Carvomenthinal	
29548-30-9	Farnesyl acetate	
29606-79-9	1-Methyl-4-isopropenylcyclohexan-3-one	p-Menth-8-en-3-one
29811-50-5		
29895-73-6		2-Benzyl-4-hydroxy-1,3-dioxane and 2-Benzyl-4-hydroxymethyl-1,3-dioxolane (mixture)
29901-85-7		
29926-41-8		
29957-43-5		
30304-82-6		
30361-28-5		
30361-29-6		
30364-38-6	Dehydroionene	
30385-25-2		
30390-50-2		

CAS	Name	FEMA	CoE	EINECS	Comments
30408-61-8	2,5-Dimethyl-4-ethyloxazole			250-181-7	
30434-64-1	3,4-Dimethylcyclopent-2-en-1-one			250-199-5	
30453-31-7	Ethyl propyl disulfide		11478		
30640-46-1	2-Methyl-1,3-cyclohexadiene				
30673-36-0	Butyl decanoate		10530	250-280-5	
30673-38-2	Isobutyl decanoate		10707	250-281-0	
30673-60-0	Propyl decanoate			250-283-1	
30895-79-5	Allyl sorbate	2041	2182		
30982-03-7	Isobutyl nonanoate		10713	250-411-6	
31148-31-9	Pentyl hexadecanoate			250-487-0	
31331-53-0	1-(Methylthio)ethane-1-thiol				
31375-17-4	6-Propionyl-p-menth-1-ene			250-600-3	
31499-71-5	Methyl ethyl trisulfide				
31499-72-6	Dihydro-alpha-ionone	3628	11059	250-657-4	
31501-11-8	Hex-3-enyl hexanoate	3403	11779	250-661-6	
31502-14-4	Non-2(trans)-en-1-ol	3379	10292	250-662-1	
31704-80-0	3-(5-Methyl-2-furyl) butanal	3307	10355	250-771-4	
32064-72-5	Non-2-en-4-one		11162	250-909-3	
32074-56-9	Diethyl citrate			250-914-0	
32214-91-8	Caryophyllene alcohol acetate			250-960-1	
32272-48-3	4-Ethyl-2-methylthiazole				
32272-57-4	2,5-Dimethyl-4-ethylthiazole				
32388-55-9	Acetylcedrene			251-020-3	
32466-55-0	trans-2-Tridecenoic acid				
32585-08-3	Methyl hex-2-enoate	2709	583		
32637-94-8	8-(Methylthio)-p-menthan-3-one				
32659-21-5	Ethyl geranate			251-144-8	
32665-23-9	Isopropyl isovalerate	2961	445	251-145-3	
32736-91-7	2,5-Diethyl-3-methylpyrazine		11304		
32737-14-7	2-Ethoxy-3-methylpyrazine	3569	11325	251-184-6	
32737-14-7	2-Methyl-3,5 or 6-ethoxypyrazine	3569	11921		
32764-98-0	Dec-8-eno-1,5-lactone			251-201-7	
32974-92-8	2-Acetyl-3-ethylpyrazine	3250	11293	251-316-2	
33046-81-0	7-Methyl-3-octenone-2			251-361-8	
33049-93-3	S-Prenyl thioacetate				
33368-80-8	Methyl prop-1-enyl trisulfide		11539		
33368-82-0	Allyl prop-1-enyl disulfide		11433		
33467-73-1	Hex-3(cis)-enyl formate	3353	2153	251-532-7	
33467-74-2	Hex-3(cis)-enyl propionate	3778	10683	251-533-2	
33467-76-4	Hept-2-en-1-ol		11773	251-534-8	
33467-79-7	Hepta-2,4-dien-1-ol			251-535-3	
33603-30-4	Methyl 2-methylpent-3-enoate				
33673-62-0	3-Methylnonano-1,4-lactone			251-629-4	
33855-57-1	Hexyl 2-hexenoate	3692			
33922-70-2	Allyl propyl sulfide		11434		
33922-73-5	Allyl propyl trisulfide		11435		

CAS	Synonyms	Systematic name
30408-61-8		
30434-64-1		
30453-31-7	Ethyl dithiopropene	
30640-46-1		
30673-36-0	Butyl caprate	
30673-38-2		2-Methylpropyl decanoate
30673-60-0	Propyl caprate	
30895-79-5		
30982-03-7		2-Methylpropyl nonanoate
31148-31-9	Amyl palmitate	
31331-53-0		
31375-17-4		1-(p-Menth-1-en-6-yl)propan-1-one
31499-71-5		
31499-72-6		4-(2,6,6-Trimethylcyclohex-2-enyl)butan-2-one
31501-11-8	3- Hexenyl caproate	
31502-14-4		
31704-80-0		
32064-72-5		
32074-56-9		
32214-91-8	Caryophyllene acetate	4,11,11-Trimethyl-8-methylene-bicyclo[7.2.0]undec-3-en-5-yl acetate
32272-48-3		
32272-57-4		
32388-55-9	Methyl cedrenyl ketone; 1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	5-Acetyl-2,2,4,8-tetramethyltricyclo[5,3,1(3,7).0(1,7)]undec-4(5)-ene
32466-55-0		
32585-08-3		
32637-94-8		
32659-21-5		Ethyl 3,7-dimethylocta-2(trans),6-dienoate
32665-23-9		Isopropyl 3-methylbutanoate
32736-91-7		
32737-14-7		
32737-14-7		
32764-98-0		
32974-92-8	2- Ethyl-3-pyrazinyl methyl ketone	
33046-81-0		
33049-93-3		3-Methylbut-2-enyl acetothioate
33368-80-8		
33368-82-0		
33467-73-1	beta,gamma-Hexenyl methanoate; (Z)-3-hexenol formate; Leaf alcohol formate.	
33467-74-2	beta,gamma-Hexenyl propanoate	
33467-76-4		
33467-79-7		
33603-30-4		
33673-62-0		
33855-57-1		
33922-70-2	(2- Propenyl)thiopropene	
33922-73-5		

CAS	Name	FEMA	CoE	EINECS	Comments
34003-72-0	5-Methyltetrahydrofuran-3-one				
34047-39-7	4-(Methylthio)butan-2-one	3375	11688	251-810-8	
34135-85-8	Methyl allyl trisulfide	3253	11867	251-843-8	
34300-94-2	3-Mercapto-3-methylbutan-1-ol				
34316-64-8	Hexyl dodecanoate			251-932-1	
34322-09-3	S-2-Butyl 3-methylbut-2-enethioate			251-938-4	
34365-79-2	S-Isopropyl 3-methylbut-2-enethioate			251-966-7	
34413-34-8	2-Acetyl-6-ethylpyrazine		11295		
34413-35-9	5,6,7,8-Tetrahydroquinoxaline	3321	721	252-002-8	
34495-71-1	Ethyl oct-4-enoate	3344	10619	252-065-1	
34545-88-5	4,4a,5,6-Tetrahydro-7-methylnaphthalen-2(3H)-one	3715		252-079-8	
34619-12-0	4-Mercaptobutan-2-one	3357	11498		
34625-23-5	Ethyl-D-glucopyranoside			252-122-0	
34713-70-7	2-Phenyl propion aldehyde				
34722-01-5	3-Butylthiophene				
34764-02-8	1,1-Diethoxydecane		531	252-202-5	
35073-27-9	2-Methylbutyl formate			252-343-2	
35154-45-1	Hex-2-enyl isovalerate			252-404-3	
35158-25-9	2-Isopropyl-5-methylhex-2-enal	3406	10361	252-406-4	
35178-55-3	Piperitenone oxide		10508		
35234-22-1	Methyl 5-acetoxyhexanoate		10756		
35250-53-4	Pyrazineethanethiol	3230	2285		
35448-31-8	N-Isopentylidene isopentylamine				
35472-56-1	Ethyl N-methylanthranilate		632		
35686-14-7	3,4-Diethylthiophene				
35852-46-1	Hex-3-enyl valerate		10686	252-761-5	
35854-86-5	Non-6-en-1-ol	3465	10294	252-764-1	
36267-71-7	5,7-Dihydro-2-methylthieno(3,4-d)pyrimidine	3338	720	252-940-8	
36413-60-2	Quinic acid			253-023-5	(3)
36431-72-8	Theaspirane	3774	10515	253-031-9	
36438-54-7	o-Tolyl isobutyrate	3753	681		
36653-82-4	Hexadecan-1-ol	2554	57	253-149-0	
36701-01-6	Furfuryl valerate	3397	10647	253-160-0	
36789-59-0	alpha-Campholene acetate	3657		253-212-2	
36806-46-9	2,6-Dimethylhept-6-en-1-ol	3663		253-223-2	
36880-33-8	5-Ethylthiophene-2-carbaldehyde			253-252-0	
36901-87-8	4-Hydroxyproline				
37064-20-3	Propyl 2-methylbutyrate		10891	253-329-9	
37526-88-8	Benzyl 2-methylcrotonate	3330	2184	253-544-8	
37617-03-1	Undec-2-en-1-ol			253-569-4	
37645-61-7	2-Butylthiazole		11597	253-577-8	
37674-63-8	2-Methylpent-3-enoic acid	3464	10147	253-610-6	
37811-72-6	Isobutyl dodecanoate		10708	253-675-0	
37887-04-0	3-Mercaptobutan-2-ol	3502	760	253-701-0	
38049-04-6	3,6-Dimethyl-5,6,7a-tetrahydro-2(4H)benz(...?)	3764			
38205-60-6	5-Acetyl-2,4-dimethylthiazole	3267	2336	253-826-0	
38205-64-0	2-Methyl-5-methoxythiazole	3192	736		

CAS	Synonyms	Systematic name
34003-72-0		
34047-39-7	(4-Methyl)-thio-2-butanone; Methyl propyl thioketone; 4-Methyl-2-butane-thione; 2-Pentane thione	
34135-85-8		
34300-94-2		
34316-64-8		
34322-09-3		
34365-79-2	S-Isopropyl thiosenecioate	
34413-34-8		
34413-35-9		
34495-71-1		
34545-88-5		
34619-12-0	2-Keto-4-butanethiol	
34625-23-5		
34713-70-7		
34722-01-5		
34764-02-8	Decanal diethyl acetal	
35073-27-9		
35154-45-1		Hex-2-enyl 3-methylbutanoate
35158-25-9		
35178-55-3		1,2-Epoxy-p-menth-4(8)-en-3-one
35234-22-1		
35250-53-4	2-Pyrazinylethanethiol	
35448-31-8		N-(3-Methylbutylidene)-3-methyl-1-butylamine
35472-56-1		Ethyl N-ethyl-2-aminobenzoate
35686-14-7		
35852-46-1	Hex-3-enyl pentanoate	
35854-86-5		
36267-71-7		
36413-60-2		1,3,4,5-tetrahydroxy cyclohexane-1-carboxylic acid
36431-72-8		2,6,10,10-Tetramethyl-1-oxaspiro[4.5]dec-6-ene
36438-54-7		2-Methylphenyl 2-methylpropanoate
36653-82-4	Cetyl alcohol; Alcohol C-16; n-hexadecyl alcohol	
36701-01-6	Furfuryl pentanoate	
36789-59-0		2-(2,2,3-Trimethylcyclopent-3-enyl)ethyl acetate
36806-46-9		
36880-33-8		
36901-87-8		4-Hydroxy pyrrolidine-2-carboxylic acid
37064-20-3		
37526-88-8	Benzyl tiglate	Benzyl 2-methylbut-2(trans)-enoate
37617-03-1		
37645-61-7		
37674-63-8		
37811-72-6		2-Methylpropyl dodecanoate
37887-04-0		
38049-04-6		
38205-60-6	2,4- Dimethyl-5-acetylthiazole	
38205-64-0		

CAS	Name	FEMA	CoE	EINECS	Comments
38284-11-6	Epoxy oxophorone				
38325-25-6	Dithia-1-methyl-8-oxa-bicyclo[3.3.0]octane-3,3'-(1'-oxa-2'-methyl)-cyclopentane) and spiro(Dithia-6-methyl-7-oxa-bicyclo[3.3.0]octane-3,3'-spiro(2,4-(1'-oxa-2-methyl)cyclopentane)	3270	2325	253-884-7	
38446-21-8	Ethyl N-ethylanthranilate		629	253-935-3	
38462-22-5	8-Mercapto-p-menthan-3-one	3177	11789	253-953-1	
38713-41-6	Isopropenylpyrazine	3296	11341		
38917-61-2	5,6-Dimethyldihydrocyclopentapyrazine				
38917-62-3	6,7-Dihydro-2,3-dimethyl-5H-cyclopentapyrazine		11309		
39067-80-6	Thiogeraniol	3472	11583	254-269-6	
39161-19-8	3-Pentenol-1		10298		
39212-23-2	3-Methyloctano-1,4-lactone	3803	10535	254-357-4	
39251-86-0	Hexyl 2-furoate	2571	361	254-377-3	
39251-88-2	Octyl 2-furoate	3518	10864	254-378-9	
39252-02-3	Furfuryl hexanoate				
39252-03-4	Furfuryl octanoate	3396	10645	254-381-5	
39255-32-8	Ethyl 2-methylvalerate	3488	10616	254-384-1	
39481-28-2	Furfuryl heptanoate				
39711-79-0	N-Ethyl-2-isopropyl-5-methylcyclohexane carboxamide	3455	2298	254-599-0	
39741-41-8	2-Acetyl-1-ethylpyrrole	3147	11371		
39748-49-7	3-Methyl-2-oxovaleric acid		10146	254-616-1	
39770-05-3	Dec-9-enal			254-624-5	
40267-72-9	Ethyl geranyl ether			254-867-7	
40323-88-4	2-Ethyl-5-methylthiophene				
40348-72-9	Methyl 2-hydroxy-4-methylvalerate	3706		254-883-4	
40379-24-6	Isononyl acetate			254-898-6	
40654-82-8	2-Methyl-4-phenylbutyraldehyde	2737	134	255-022-5	
40716-66-3	trans-3,7,11-Trimethyldodeca-1,6,10-trien-3-ol			255-053-4	
40789-98-8	3-Mercaptobutan-2-one	3298	11497	255-082-2	
40790-04-3	Di-(3-oxobutyl) sulfide	3335	11441		
40790-20-3	2,5-Dimethyl-3-isopropylpyrazine		11318		
40878-72-6	2-(Methylthiomethyl)but-2-enal	3601	11549	255-126-0	
40923-64-6	3-Heptyldihydro-5-methyl-2(3H)-furanone	3350	10953	255-141-2	
41114-00-5	Ethyl pentadecanoate		10622	255-223-8	
41199-19-3	1,2,3,4,4a,5,6,7-Octahydro-2,5,5-trimethylnaphthalen-2-ol		10173	255-256-8	
41239-48-9	2,5-Diethyltetrahydrofuran	3743	11882	255-274-6	
41270-80-8	Methyl N-formylanthranilate			255-287-7	
41280-22-8	Allyl thiopropionate	3329	11436		
41330-21-6	6,7-Dihydro-5,7-dimethyl-5H-cyclopentapyrazine				
41436-42-4	delta-Damascone	3622			
41453-56-9	Non-2(cis)-en-1-ol	3720	10292	255-376-0	
41496-43-9	2-Methyl-3-(p-tolyl)propionaldehyde	2748	587	255-410-4	
41519-23-7	Hex-3(cis)-enyl isobutyrate		11783	255-424-0	
41547-22-2	Oct-5(cis)-enal	3749			

CAS	Synonyms	Systematic name
38284-11-6	1,3,3-Trimethyl-7-oxabicyclo[4.1.0] heptane-2,5-dione	2,3-epoxy-2,6,6-trimethyl-1,4-cyclohexanedione
38325-25-6		
38446-21-8		Ethyl N-ethyl-2-aminobenzoate
38462-22-5	8- Mercaptomenthone; p- Mentha-8-thiol-3-one; Thiomenthone	
38713-41-6		(1-Methylene-ethyl)pyrazine
38917-61-2		
38917-62-3		
39067-80-6		3,7-Dimethyl-2(trans),6-octadiene-1-thiol
39161-19-8		
39212-23-2	beta- Methyl-gamma-octalactone; 4- Butyl-3-methyl-1,4-butyrolactone; oak lactone; whisky lactone; 5- butyl-4-methyl-2(3H)-furanone; 4-Hydroxy-3-methyloctanoic acid lactone	
39251-86-0		
39251-88-2		
39252-02-3		
39252-03-4	Furfuryl caprylate	
39255-32-8	Ethyl 2-methylpentanoate	
39481-28-2		
39711-79-0	N-ethyl-p-menthane-3-carboxamide	
39741-41-8		
39748-49-7		
39770-05-3		
40267-72-9	Geranyl ethyl ether	1-Ethoxy-3,7-dimethylocta-2(trans),6-diene
40323-88-4		
40348-72-9		
40379-24-6		7-Methyloctyl acetate
40654-82-8	2-Methyl-4-phenylbutanal	
40716-66-3		
40789-98-8		
40790-04-3	bis(Butan-3-one-1-yl) sulfide	
40790-20-3		
40878-72-6		
40923-64-6	alpha-Heptyl-gamma-valerolactone	
41114-00-5		
41199-19-3	Ambrinol; 2,5,5- Trimethyl-2-hydroxyoctalin	
41239-48-9		
41270-80-8		Methyl N-formyl-2-aminobenzoate
41280-22-8		
41330-21-6		
41436-42-4		
41453-56-9		
41496-43-9	2- Methyl-3-(4-methylphenyl)propanal	
41519-23-7	beta,gamma-Hexenyl isobutanoate	Hex-3(cis)-enyl 2-methylpropanoate
41547-22-2		

CAS	Name	FEMA	CoE	EINECS	Comments
41763-99-9	2-Methylfuran-3(2H)-one				
41820-22-8	Allyl thiopropionate	3329	11436		
41981-71-9	2,5-Diethyl-4-methylthiazole				
41981-72-0	4,5-Dimethyl-2-propylthiazole			255-604-9	
42075-43-4	S-Methyl pentanethioate				
42075-45-6	Methyl 2-(methylthio)butyrate	3708		255-648-9	
42078-65-9	2-Phenethyl 3-methylcrotonate	2869	246	255-649-4	
42125-17-7	Hex-4-enyl acetate				
42175-41-7	Benzyl decanoate			255-696-0	
42231-99-2	Hexyl tetradecanoate			255-722-0	
42348-12-9	3-Ethyl-2-hydroxy-4-methylcyclopent-2-en-1-one	3453	11077	255-767-6	
42436-07-7	Hex-3(cis)-enyl phenylacetate	3633	10682	255-826-6	
42474-44-3	2,3,5-Trithiahexane				
42919-64-2	4-(Methylthio)butanal	3414	11542	256-001-3	
43039-98-1	2-Propionylthiazole	3611			
43040-01-3	3-Methyl-1,2,4-trithiane	3718		256-056-3	
43052-87-5	alpha-Damascone	3659	11053		
43108-58-3	2-Acetyl-5-ethylpyrazine				
43219-68-7	1-(1,4-Dimethylcyclohex-3-en-1-yl)ethan-1-one	3449	11062	256-150-4	
45019-28-1	4-Methylnonanoic acid	3574	11925	256-180-8	
49576-57-0	2-Methyloct-2-enal	3711	10363	256-386-8	
49773-24-2	Ethyl 2-methyl-2-(methylthio)propionate		11473	256-483-5	
50623-57-9	Butyl nonanoate			256-661-2	
50626-02-3	2-Phenyl-3-carbethoxyfuran	3468	2309	256-663-3	
50649-12-2	Linalyl 3-methylbutyrate	2646	449		
50746-10-6	3-Mercapto-3-methylbutyl formate				
50816-18-7	Dec-9-enyl acetate			256-784-1	
50862-12-9	Heptyl 2-methylbutyrate		10668	256-811-7	
51100-54-0	Dec-1-en-3-ol			256-967-6	
51115-63-0	2-Hydroxy-2-methylbutyl benzoate			256-972-3	
51115-64-1	2-Methylbutyl butyrate			256-973-9	
51115-67-4	2-Isopropyl- N,2,3-trimethylbutanamide	3804	10459	256-974-4	
51154-96-2	2-Decen-1,5-lactone	3744			
51325-37-2	Deca-2,4,7-trienal				
51532-26-4	Geranyl octanoate			257-256-3	
51534-36-2	Tetradec-2-enal				
51534-66-8	Methyl 2-(methylthio)butyrate	3708			
51647-38-2	3-Methyl-1,2,4-trithiolane				
51755-66-9	3-(Methylthio)hexan-1-ol	3438	11548	257-380-8	
51755-85-2	3-(Methylthio)hexyl acetate	3789			
51933-13-2	3,3-Diethoxybutan-2-one				
52104-11-7	Caryolanol-1				
52414-91-2	4-Ethyl-5-methylthiazole			257-904-5	
52513-03-8	2-Methyl butyl benzoate			257-982-0	
52517-53-0	5-Ethyl-6,7-dihydro-5H-cyclopentapyrazine				
52517-54-1	5,6,7,8-Tetrahydro-5-methylquinoxaline				
52789-73-8	1-Acetoxy-1-acetylcyclohexane	3701		258-186-6	

CAS	Synonyms	Systematic name
41763-99-9		
41820-22-8		
41981-71-9		
41981-72-0		
42075-43-4		
42075-45-6		
42078-65-9	Phenethyl senecioate	2-Phenylethyl 3-methylbut-2(trans)-enoate
42125-17-7		
42175-41-7		
42231-99-2		
42348-12-9	3-Ethyl-4-methylcyclohexene	
42436-07-7	beta,gamma-Hexenyl alpha-toluate	
42474-44-3		
42919-64-2		
43039-98-1		
43040-01-3		
43052-87-5		1-(2,6,6-Trimethylcyclohex-2-enyl)but-2-en-1-one
43108-58-3		
43219-68-7	4-Acetyl-1,4-dimethylcyclohex-1-ene	
45019-28-1		
49576-57-0		
49773-24-2	Ethyl 2-(methylmercapto)isobutyrate	
50623-57-9		
50626-02-3	Phenyl oxaromate	Ethyl 2-phenyl-3-furoate
50649-12-2		
50746-10-6		
50816-18-7	Rosalva acetate	
50862-12-9		
51100-54-0		
51115-63-0		
51115-64-1		
51115-67-4	2-Isopropyl-N,2,3-trimethylbutyramide; N,2,3-trimethyl-2-isopropylbutanamide	
51154-96-2	Massoia lactone	
51325-37-2		
51532-26-4	Geranyl caprylate	3,7-Dimethylocta-2(trans),6-dienyl octanoate
51534-36-2		
51534-66-8		
51647-38-2		
51755-66-9		
51755-85-2		
51933-13-2		
52104-11-7		
52414-91-2		
52513-03-8		
52517-53-0		
52517-54-1		
52789-73-8	Methyl 1-acetoxycyclohexyl	

CAS	Name	FEMA	CoE	EINECS	Comments
53053-51-3	Methyl 4-(methylthio)butyrate	3412	11526	258-328-7	
53119-25-8	2-Pentanoylthiophene				
53263-58-4	5-Ethyl-2-hydroxy-3-methylcyclopent-2-en-1-one	3454	11078	258-451-6	
53398-78-0	Hex-2-enyl formate		11858	258-512-7	
53398-80-4	Hex-2(trans)-enyl propionate	3778	11830	258-513-2	
53398-83-7	Hex-2-enyl butyrate			258-515-3	
53398-85-9	cis-3-Hexenyl 2-methylbutanoate	3497	2345	258-517-4	
53398-86-0	Hex-2-enyl hexanoate			258-519-5	
53398-87-1	Hex-3-enyl hex-2-enoate				
53399-81-8	Ethyl 2-methylpent-4-enoate	3489	10613	258-520-0	
53405-97-3	1,1-Diethoxyundecane			258-539-4	
53405-98-4	1,1-Diethoxydodecane			258-541-5	
53448-07-0	Undec-2(trans)-enal	3423	11827	258-559-3	
53498-30-9	2-Isopropyl-4,5-dimethylthiazole				
53498-32-1	2-Isobutyl-4,5-dimethylthiazole		11617	258-586-0	
53626-94-1	S-Prenyl thioisobutyrate				
53833-30-0	4,5-Dimethyl-2-ethyloxazole	3672		258-815-4	
53833-32-2	4,5-Dimethyl-2-propyloxazole		11379	258-817-5	
53956-04-0	Glycyrrhizic acid, ammoniated	2528	2221	258-887-7	(1)-(3)
54300-08-2	2-Acetyl-3,5-dimethylpyrazine	3327	11294	259-076-0	
54300-10-6	5-Acetyl-2,3-dimethylpyrazine				
54340-72-6	Ethyl hept-2-enoate				
54411-06-2	2-Butyl-5-ethylthiophene		11596		
54484-73-0	1-Ethoxy-1-hexyloxyethane		11948	259-184-8	
54644-28-9	3,5-Diethyl-1,2,4-trithiolane				
54717-17-8	Dihydro-2,4,6-triethyl-1,3,5(4H)-dithiazine				
54814-64-1	Dec-2-eno-1,5-lactone	3744		259-359-9	
54815-13-3	1,1-Diethoxynonane		10016	259-360-4	
54852-64-1	Benzyl octyl ether				
54889-48-4	1,1-Diethoxyoctane			259-385-0	
54934-99-5	3,5-Di-isopropyl-1,2,4-trithiolane				
54947-74-9	4-Methyloctanoic acid	3575	11926	259-404-2	
54957-02-7	3-[(2-Mercapto-1-methylpropyl)thio]butan-2-ol	3509	2353		
54993-30-5	Cyclogeranyl acetate				
55031-15-7	3,(5- or 6-)Dimethyl-2-ethylpyrazine		727		
55066-56-3	4-Methylphenyl isovalerate	3387	10545	259-465-5	
55195-23-8	2-Methylbutyl decanoate		10765		
55253-28-6	5-Isopropenyl-2-methylcyclopentanecarboxaldehyde	3645			
55418-52-5	Piperonyl acetone	2701	165	259-630-1	
55704-78-4	2,5-Dihydroxy-2,5-dimethyl-1,4-dithiane	3450	2322	259-770-3	
55719-85-2	Phenethyl 2-methylcrotonate	2870	2186	259-774-5	
55764-22-2	2,5-Dimethyl-3-thioacetoxifuran			259-799-1	
55764-23-3	2,5-Dimethylfuran-3-thiol	3451	11457	259-800-5	
55764-25-5	2-Methyl-3-furyl thioacetate			259-801-0	
55764-28-8	2,5-Dimethyl-3-(isopentylthio)furan	3482	2324	259-802-6	

CAS	Synonyms	Systematic name
53053-51-3		
53119-25-8		
53263-58-4	5- Ethyl-3-methylcycloctene	
53398-78-0		
53398-80-4	2-Hexenyl propanoate	
53398-83-7		
53398-85-9		
53398-86-0		
53398-87-1		
53399-81-8		
53405-97-3	Undecanal diethyl acetal	
53405-98-4	Dodecanal diethyl acetal	
53448-07-0		
53498-30-9		
53498-32-1		4,5-Dimethyl-2-(2-methylpropyl)thiazole
53626-94-1		S-(3-Methylbut-2-enyl) 2-methylpropanethioate
53833-30-0		
53833-32-2		
53956-04-0		
54300-08-2		
54300-10-6		
54340-72-6		
54411-06-2		
54484-73-0	Acetaldehyde ethyl hexyl acetal; 1-(1-Ethoxyethoxy) hexane	
54644-28-9		
54717-17-8		
54814-64-1	Massoia lactone	
54815-13-3	Nonanal diethyl acetal	
54852-64-1		
54889-48-4	Octanal diethyl acetal	
54934-99-5		
54947-74-9		
54957-02-7	alpha- Methyl-beta-hydroxypropyl alpha-methyl-beta-mercaptopropyl sulfide	
54993-30-5		(2,6,6-Trimethyl-1-cyclohexenyl)methyl acetate
55031-15-7	2,(5 or 6)- Dimethyl-3-ethylpyrazine; 2-Ethyl-3,5(6)-dimethyl pyrazine; 3-Ethyl-2,5(6)-dimethyl pyrazine	
55066-56-3	p- Cresyl isopentanoate; 4- Methylphenyl 3-methylbutyrate; p-Toly isovalerate; p-Toly-3-methyl butyrate	4-Methylphenyl 3-methylbutanoate
55195-23-8		
55253-28-6	Photocitral A	5-(1-Methylene-ethyl)-2- methylcyclopentanecarboxaldehyde
55418-52-5		4-(3,4-Methylenedioxyphenyl)butan-2-one
55704-78-4		
55719-85-2	Phenethyl tiglate	2-Phenylethyl 2-methylbut-2(trans)-enoate
55764-22-2		
55764-23-3	2,5- Dimethyl-3-mercaptofuran	
55764-25-5		
55764-28-8		2,5-Dimethyl-3-(3-methylbutylthio)furan

CAS	Name	FEMA	CoE	EINECS	Comments
56001-43-5	Nerolidyl acetate		10862	259-941-2	
56134-05-5	2,5-Dimethyl-2-vinylhex-4-enal			260-006-6	
56423-40-6	Benzyl 2-methylbutyrate		10523	260-169-3	
56423-43-9	Heptyl isovalerate		10667	260-170-9	
56469-39-7	Linalool oxide(5) acetate				
56681-06-2	4-(2,3,6-Trimethylphenyl)but-3-en-2-one				
56722-23-7	Undeca-1,5-dien-3-ol				
56767-18-1	Octa-2(trans),6(trans)-dienal	3466	10371	260-372-7	
56922-80-6	trans-3-Hexenyl formate	3353		260-442-7	
56922-82-8	trans-3-Hexenyl hexanoate				
57006-87-8	1-Butoxy-1-ethoxyethane		10003		
57018-53-8	Nona-2,4,6-trienal				
57069-86-0	Dehydrodihydroionol	3446	10195		
57074-34-7	8-Acetylthio-p-menthan-3-one			260-546-2	
57124-87-5	2-Methyltetrahydrofuran-3-thiol	3787		260-572-4	
57378-68-4	delta-Damascone	3622		260-709-8	
57403-32-4	Butyl oct-2-enoate		10536	260-720-8	
57500-00-2	Methyl furfuryl disulfide	3362	11513	260-773-7	
57568-60-2	2-Phenyl-3-(2-furyl)-prop-2-enal	3586	11928		
57576-09-7	Isopulegyl acetate	2965	2067	260-820-1	
57696-89-6	2-Hydroxy-3,5,5-trimethyl-2-cyclohexen-1-one	3459			
57709-95-2	2-Acetoxy-1,8-cineole				
57726-26-8	Ethyl 4-hydroxybenzyl ether			260-918-4	
57743-63-2	3a,4,5,7a-Tetrahydro-3,6-dimethylbenzofuran-2(3H)-one				
57856-81-2	cis-3-Hexenyl trans-2-hexenoate			260-992-8	
57893-27-3	6-Acetoxydihydrotheaspirane	3651		261-005-3	
58066-86-7	1-(2-Furfurylthio)propanone				
58102-02-6	alpha-Methyl ional			261-121-4	
58430-94-7	3,5,5-Trimethylhexylacetate			261-245-9	
58479-55-3	Isobornyl butyrate		564	261-281-5	
58625-95-9	Hexyl-2-methylpent-(3 and 4)-enoate	3693			
58809-73-7	2-(Methylthio)propionic acid			261-450-3	
58985-18-5	p-Menthan-8-yl acetate			261-543-9	
59020-84-7	Furfuryl but-2-enoate				
59020-85-8	S-Furfuryl propanethioate	3347	11484	261-562-2	
59020-90-5	2-Furfuryl thioformate	3158	11770	261-563-8	
59021-02-2	Mercaptomethylpyrazine	3299	11502		
59184-43-9	1-Ethoxy-1-pentylxyethane		10046		
59191-78-5	3-(Hydroxymethyl)octan-2-one	3292	11113	261-652-1	
59230-57-8	4-Isopropylbenzyl acetate			261-671-5	
59259-38-0	l-Menthyl lactate	3748		261-678-3	
59303-05-8	5-Methyl-2-furanmethanethiol				
59303-17-2	2-Acetyl-5-methylthiazole				
59324-17-3	trans-2-Methyl-4-propyl-1,3-oxathiane			261-700-1	
59376-58-8	Undeca-2,4-dien-1-ol			261-722-1	
59558-23-5	p-Tolyl octanoate	3733		261-803-1	
59902-01-1	2,8-Dithianon-4-en-4-carboxaldehyde	3483	11904	261-978-4	

CAS	Synonyms	Systematic name
56001-43-5		1,5,9-Trimethyl-1-vinyl-4(cis),8-decadienyl acetate
56134-05-5	Neroli aldehyde	
56423-40-6		
56423-43-9		Heptyl3-methylbutanoate
56469-39-7		2-(5-methyl-5-vinyltetrahydro-2-furyl)propan-2-yl acetate
56681-06-2		
56722-23-7		
56767-18-1		
56922-80-6		
56922-82-8		
57006-87-8	Acetaldehyde butyl ethyl acetal	
57018-53-8		
57069-86-0		4-(2,6,6- Trimethyl-1,3-cyclohexadienyl)-butan-2-ol
57074-34-7		
57124-87-5		
57378-68-4		1-(2,6,6-Trimehtylcyclohex-3-enyl)but-2-en-1-one
57403-32-4		
57500-00-2		
57568-60-2		
57576-09-7	5-Methyl-2-isopropenylcyclohexyl acetate	p-Menth-8-en-3-yl acetate
57696-89-6		
57709-95-2		2-Acetoxy-1,8-epoxy-p-menthane
57726-26-8		
57743-63-2		
57856-81-2	2-Propenyldecanoate	
57893-27-3		2,6,10,10-Tetramethyl-1-oxaspiro[4.5]decan-6-yl acetate
58066-86-7		
58102-02-6		2-Methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-enal
58430-94-7		
58479-55-3		1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl butanoate
58625-95-9		
58809-73-7		
58985-18-5	Dihydro-alpha-terpinyl acetate	
59020-84-7		
59020-85-8	Furfuryl thiopropionate	
59020-90-5	2-Furmethanethiol formate	
59021-02-2	Pyrazine methanethiol	
59184-43-9	Acetaldehyde ethyl amyl acetal; Acetaldehyde ethyl pentyl acetal	
59191-78-5		
59230-57-8	Cuminyll acetate	
59259-38-0		
59303-05-8		
59303-17-2		
59324-17-3		
59376-58-8		
59558-23-5		4-Methylphenyl octanoate
59902-01-1		5-Methylthio-2-[(methylthio)methyl]pent-2-enal

CAS	Name	FEMA	CoE	EINECS	Comments
60045-26-3	3-Phenylpropyl benzoate				
60045-27-4	3-Phenylpropyl 3-phenylpropionate			262-036-5	
60047-17-8	5-(2-Hydroxyisopropyl)-2-methyl-2-vinyltetrahydrofuran	3746		262-038-6	
60066-88-8	beta-Sinensal		10381	262-043-3	
60415-61-4	1-Methylbutyl butyrate		10763	262-226-8	
60437-21-0	Tridec-12-en-2-one				
60523-21-9	Ethyl 2-methylpenta-3,4-dienoate	3678		262-278-1	
60755-05-7	2,4-Dimethyl-3-thiazoline			262-405-0	
60770-00-5	Ethyl 2-hydroxy-4-methylbenzoate				
60779-24-0	Methyl butyl disulfide				
61122-71-2	S-Methyl 4-methylpentanethioate				
61197-06-6	2,5-Dimethyl-3-(methylthio)furan				
61197-09-9	Propyl 2-methyl-3-furyl disulfide	3607		262-650-3	
61295-41-8	3-((2-Methyl-3-furyl)thio)heptan-4-one	3570	11922	262-690-1	
61295-50-9	4-((2-Methyl-3-furyl)thio)nonan-5-one	3571	11923	262-691-7	
61295-51-0	2,6-Dimethyl-3-((2-methyl-3-furyl)thio)heptan-4-one	3538	11915	262-692-2	
61323-24-8	2-isoButyl-4-methyl thiazole			262-709-3	
61444-38-0	Hex-3-enyl hex-3-enoate	3689		262-797-3	
61444-39-1	3-Hexenyl heptanoate			262-798-9	
61444-41-5	Hex-3-enyl octanoate			262-799-4	
61789-17-1	Guaiyl acetate		10659		
61792-12-9	Cinnamyl 2-methylcrotonate			263-215-0	
61810-55-7	2-Phenethyl decanoate		10881	263-237-0	
61931-81-5	Hex-3-enyl lactate	3690	10681	263-337-4	
62147-49-3	2,5-Dihydroxy-2,5-di(hydroxymethyl)-1,4-dioxane				
62488-24-8	Isopentyl tetradecanoate		10722	263-570-1	
62488-56-6	Nona-2,4-dien-1-ol		11802	263-571-7	
63012-97-5	2-Methyl-3-(methylthio)furan				
63095-33-0	cis-Dec-7-eno-1,4-lactone			263-852-4	
63270-14-4	Nonanediol diacetate	2783		264-060-1	
63359-63-7	2,5-Dimethyl-3-(methylthio)furan				
63449-68-3	2-Naphthyl anthranilate	2767	11862	264-155-8	
63450-36-2	2,4-Nonadienol-1		11802	264-171-2	
63759-55-7	2-Pentylbut-1-en-3-one	3725		264-448-0	
63826-25-5	Oct-6-enal		664		
64181-20-0	Phenethyl crotonate		10880		
64275-73-6	Oct-5(cis)-en-1-ol	3722		264-764-9	
64280-32-6	2,4-Difurfurylfuran				
64577-91-9	1-Butoxy-1-(2-phenylethoxy)ethane	3125	10007	264-948-9	
65016-61-7	3-Heptylthiophene				
65213-86-7	Octa-1,5-dien-3-one				
65330-49-6	2,5-Dimethyl-4-ethoxyfuran-3(2H)-one			265-701-8	
65405-67-6	3-(4-Methoxyphenyl)-2-methylprop-2-enal	3182	584	265-737-4	
65405-70-1	Dec-4(trans)-enal			265-741-6	
65405-76-7	Hex-3(cis)-enyl anthranilate		10676	265-744-2	
65405-77-8	Hex-3-enyl salicylate		10685	265-745-8	
65405-80-3	Hex-3-enyl but-2-enoate			265-746-3	

CAS	Synonyms	Systematic name
60045-26-3		
60045-27-4		
60047-17-8		
60066-88-8		2,6-Dimethyl-10-methylene dodeca-2,6,11-trienal
60415-61-4	Pent-2-yl butyrate	
60437-21-0		
60523-21-9		
60755-05-7		
60770-00-5		
60779-24-0		
61122-71-2		
61197-06-6		
61197-09-9		
61295-41-8		
61295-50-9		
61295-51-0		
61323-24-8		
61444-38-0		
61444-39-1		
61444-41-5		
61789-17-1		
61792-12-9	Cinnamyl tiglate	3-Phenylprop-2-enyl 2-methylbut-2(trans)-enoate
61810-55-7	Phenethyl caprate	
61931-81-5		Hex-3-enyl 2-hydroxypropanoate
62147-49-3		
62488-24-8	Isoamyl myristate	3-Methylbutyl tetradecanoate
62488-56-6		
63012-97-5		
63095-33-0		
63270-14-4		
63359-63-7		
63449-68-3		Naph-2-yl 2-aminobenzoate
63450-36-2		
63759-55-7		3-Methyleneoctan-2-one
63826-25-5		
64181-20-0		Phenylethyl but-2(trans)-enoate
64275-73-6		
64280-32-6		
64577-91-9	Acetaldehyde butyl phenethyl acetal	
65016-61-7		
65213-86-7		
65330-49-6		
65405-67-6	alpha- Methyl-p-methoxycinnamaldehyde	
65405-70-1		
65405-76-7		Hex-3(cis)-enyl 2-aminobenzoate
65405-77-8		Hex-3-enyl 2-hydroxybenzoate
65405-80-3		

CAS	Name	FEMA	CoE	EINECS	Comments
65405-84-7	4-(2,6,6-Trimethylcyclohexenyl)-2-methylbutanal			265-747-9	
65416-14-0	Maltyl isobutyrate	3462	10739	265-755-2	
65416-24-2	Benzyl crotonate			265-764-1	
65416-59-3	6-Methylene-2,10,10-trimethyl-1-oxaspiro[4.5]dec-7-ene				
65504-45-2	2-Butyl-5 or 6-keto-1,4-dioxane	2204	2206		
65504-93-0	1-Phenyl-(3 or 5)-propylpyrazole	3727	2277		
65504-96-3	2-Pentyl-5 or 6-keto-1,4-dioxane	2076	2205		
65505-16-0	2,5-Dimethyl-3-thiofuroylfuran	3481	2323	265-796-6	
65505-17-1	Methyl 2-methyl-3-furyl disulfide	3573	11924	265-797-1	
65505-18-2	2,4-Dimethyl-5-vinylthiazole	3145	2237		
65505-24-0	Isobutyl N-methylanthranilate		649	265-798-7	
65505-25-1	Tetrahydrofurfuryl cinnamate	3320	11821	265-799-2	
65530-53-2	2-Methyl-3,5 and 6-(furfurylthio)pyrazine	3189	2287		
65545-81-5	3-(2-Furyl)-2-phenylprop-2-enal	3586	11928		
65588-69-4	1,5,5,9-Tetramethyl-13-oxatricyclo[8.3.0.0(4.9)]tridecane	3471	10514		
65620-50-0	6-Hydroxydihydrotheaspirane	3549	11917		
65813-53-8	2-Phenylpropyl isobutyrate	2892	2087	265-931-9	
65887-08-3	2-(Methylthiomethyl)-3-phenylpropenal	3717			
65894-82-8	2-(sec-Butyl)-4,5-dimethyl-3-thiazoline	3619		265-968-0	
65894-83-9	4,5-Dimethyl-2-isobutyl-3-thiazoline	3621		265-969-6	
66169-00-4	Methyl furfuryl trisulfide				
66576-71-4	Isopropyl 2-methylbutyrate	3699		266-411-4	
66735-69-1	1-(Methylthio)pentan-3-one				
67028-40-4	Ethyl (p-tolyloxy)acetate	3157	2243	266-554-2	
67114-38-9	Dec-7-eno-1,4-lactone				
67121-39-5	2-Methylbutyl octanoate		10776		
67233-91-4	Ethyl dec-9-enoate		10579		
67401-26-7	5,8-Megastigmadienone-4			266-683-4	
67401-27-8	Megastigma-5,8-dien-4-one			266-685-5	
67411-27-2	3,6-Dimethyl-1,2,4,5-tetrathiane				
67633-96-9	3-Hexenyl methyl carbonate			266-797-4	
67633-97-0	3-Mercaptopentan-2-one	3300	2327	266-799-5	
67674-36-6	1,1-Diethoxynona-2,6-diene	3378	660	266-874-2	
67674-41-3	Phenylmethyl 2-methyl-2-butenolate	3330	2184	266-880-5	
67715-79-1	1,2-Di((1'-ethoxy)-ethoxy)propane	3534		266-979-3	
67715-80-4	2-Methyl-4-propyl-1,3-oxathiane	3578	11540		
67715-81-5	Nonane-1,4-diyl diacetate	3579	11927		
67715-82-6	1,2,3-Tris([1'-ethoxy]-ethoxy)propane	3593	11930		
67746-30-9	1,1-Diethoxyhex-2-ene		2135	266-989-8	
67801-35-8	3-((2-Mercapto-1-methylpropyl)thio)butan-2-ol			267-155-6	
67845-28-7	2-Methyl-6-propoxypyrazine		11355	267-306-6	
67860-38-2	4-Acetyl-2-methylpyrimidine	3654			
67874-80-0	2,6-Dimethyloctanyl butyrate			267-508-4	
67879-60-1	2-Isopropyl-4-methyl-1,3-dioxolane			267-550-3	
67883-79-8	Hex-3(cis)-enyl 2-methylcrotonate			267-554-5	
67952-59-4	2-Isopropyl-3-methylthiopyrazine		11342	267-913-6	

CAS	Synonyms	Systematic name
65405-84-7	alpha,2,2,6-Tetramethylcyclohexene butanal	
65416-14-0		2-Methyl-4H-pyran-4-one-3-yl 2-methylpropanoate
65416-24-2		Benzyl but-2(trans)-enoate
65416-59-3	Vitispirane	
65504-45-2		
65504-93-0		
65504-96-3		
65505-16-0		
65505-17-1		
65505-18-2		
65505-24-0		2-Methylpropyl N-methyl-2-aminobenzoate
65505-25-1		Tetrahydrofurfuryl 3-phenylprop-2-enoate
65530-53-2	Methyl(furfurylthio)pyrazine (mixture of isomers)	
65545-81-5		
65588-69-4		
65620-50-0		2,6,10,10-Tetramethyl-1-oxaspiro[4.5]decan-6-ol
65813-53-8		2-Phenylpropyl 2-methylpropanoate
65887-08-3	alpha-Benzylidenemethional	
65894-82-8	2,5-Dihydro-4,5-dimethyl-2-but-2-ylthiazole	2-(1-Methylpropyl)-4,5-dimethyl-3-thiazoline
65894-83-9	4,5-Dimethyl-2-(2-methylpropyl)-3-thiazoline	
66169-00-4		
66576-71-4		
66735-69-1		
67028-40-4	Ethyl cresoxyacetate	Ethyl (4-methylphenoxy)acetate
67114-38-9		
67121-39-5		
67233-91-4		
67401-26-7		
67401-27-8		3-(2-Butenyl)-2,4,4-trimethylcyclohex-2-ene-1-one
67411-27-2		
67633-96-9		
67633-97-0		
67674-36-6	Nonadienyl diethyl acetal	
67674-41-3		
67715-79-1	4,6,9-Trimethyl-3,5,8,10-tetraoxadodecane	
67715-80-4		
67715-81-5	Nonanediol-1,4 acetate	
67715-82-6		
67746-30-9	2-Hexenal diethyl acetal	
67801-35-8		
67845-28-7		
67860-38-2		
67874-80-0	Tetrahydrogeranyl butanoate	
67879-60-1		
67883-79-8	cis-3-Hexenyl tiglate; cis-3-Hexenyl-2-methyl-trans-2-butenolate	Hex-3(cis)-enyl 2-methylbut-2(trans)-enoate
67952-59-4		2-(2-methylpropyl)-3-(methylthio)pyrazine

CAS	Name	FEMA	CoE	EINECS	Comments
67952-60-7	2-Methyl-2-(methylthio)propanal			267-914-1	
67952-65-2	2-Methyl-3,5 or 6-methylthiopyrazine	3208	2290	267-918-3	
68039-26-9	Pentyl 2-methylbutyrate		10875	268-244-2	
68084-03-7	Di-isopentyl thiomalate		11454	268-416-7	
68129-81-7	Vetiverol			268-578-9	
68133-76-6	Hex-3-enyl 2-oxopropionate		10684	268-703-7	
68133-78-8	Hex-2-enyl phenylacetate			268-705-8	
68165-40-2	2,4,6-Tri-isobutyl-1,3,5-trioxane			269-012-3	
68227-51-0	2-Methyl-5-oxocyclopent-1-enyl butyrate		11787	269-363-2	
68228-05-7	6,10-Dimethylundecadien-2-one			269-400-2	
68345-22-2	1,1-Di-isobutoxy-2-phenylethane	3384	595	269-851-5	
68378-13-2	2,5 or 6-Methoxy-3-methylpyrazine	3183	2266	269-881-9	
68398-18-5	2,8-Epithio-p-menthane			269-970-2	
68480-25-1	Tridec-2-en-1-ol			270-902-9	
68480-28-4	Prenyl formate			270-906-0	
68527-74-2	Vanillin propylene glycol acetal				
68555-58-8	Prenyl salicylate			271-434-8	
68705-63-5	Geranyl 2-methylbutyrate			272-100-4	
68739-00-4	2,5 or 6-Methoxy-3-ethylpyrazine	3280	11329	272-125-0	
68922-10-1	Citronellyl isovalerate		455	272-982-0	
68922-11-2	1-Methyl-2-phenethyl butyrate	3197	2276	272-983-6	
68959-28-4	8-Undec-8-eno-1,5-lactone	3758		273-411-8	
69112-21-6	Hex-3(trans)-enal			273-874-6	
69925-33-3	Ethyl octa-4,7-dienoate	3682			
70475-38-6	Propyl 2-methylbut-2-enoate				
70664-96-9	Octa-3,5-dien-1-ol				
70851-61-5	cis-5-Hexenyldihydro-5-methylfuran-2(3H)-one			274-942-8	
71159-90-5	p-Menth-1-ene-8-thiol	3700		275-223-1	
71298-42-5	1,2,5,6-Tetrahydrocuminic acid	3731			
71662-27-6	Ethyl butyryl lactate		2242	275-793-1	
72361-41-2	3-Mercaptopinane	3503	2332	276-598-4	
72472-02-7	2,4,4-Trimethyl-1,3-oxathiane				
72854-42-3	Heptanal glyceryl acetal (mixed 1,2 and 1,3 acetals)	2542	2016	276-947-0	
72869-75-1	Diallyl polysulfides	3533	11912		
72881-27-7	Dec-(5- and 6)-enoic acid	3742			
72928-48-4	Decyl 3-methylbutyrate			277-077-4	
72928-52-0	Myrtenyl formate	3405	10858	277-082-1	
73019-14-4	Geranyl 2-ethylbutyrate	3339	11667	277-234-7	
73545-18-3	1,1-Diethoxyhex-3-ene			277-532-7	
74183-60-1	2,7-Dimethylocta-5(trans),7-dieno-1,4-lactone				
74298-89-8	Pent-2-enyl hexanoate			277-808-7	
74367-97-8	Ethyl 2,3-epoxy-3-methyl-3-p-tolylpropionate	3757	11707	277-844-3	
74586-09-7	Methylthio 2-(acetyloxy)propionate	3788			
74595-94-1	5,6-Dihydro-2,4,6,tris(2-methylpropyl)4H-1,3,5-dithiazine				
74758-91-1	Methylthiomethyl hexanoate			277-988-7	

CAS	Synonyms	Systematic name
67952-60-7		
67952-65-2	Methyl(methylthio)pyrazine (mixture of isomers)	
68039-26-9	Amyl 2-methylbutyrate	
68084-03-7		Di(3-methylbutyl) but-2(cis)-enebis(thioate)
68129-81-7		
68133-76-6	Hex-3-enyl pyruvate	
68133-78-8		
68165-40-2		2,4,6-Tri(2-methylpropyl)-1,3,5-trioxane
68227-51-0	Methylcyclopentenolone butyrate; Maple lactone butyrate	
68228-05-7		
68345-22-2	Phenylacetaldehyde di-isobutyl acetal	1,1-Di(2-methylpropoxy)-2-phenylethane
68378-13-2		
68398-18-5		
68480-25-1		
68480-28-4		3-Methylbut-2-enyl formate
68527-74-2	4-methyl-2-(4-hydroxy-3-methoxyphenyl)-1,3-dioxolane	
68555-58-8		3-Methylbut-2-enyl 2-hydroxybenzoate
68705-63-5		3,7-Dimethyl-2(trans),6-octadienyl 2-methylbutanoate
68739-00-4	3-Ethyl-(5 or 6)-methoxypyrazine, 5 or 6-Methoxy-3-ethyl-pyrazine	
68922-10-1	Citronellyl isopentanoate	3,7-Dimethyloct-6-enyl 3-methylbutanoate
68922-11-2	1-Phenyl-2-propyl butyrate; alpha-Methylphenethyl butyrate	
68959-28-4	5-Hydroxyundec-8-enoic acid deltalactone; 6-(3-Hexenyl)tetrahydro(2H)pyran-2-one	
69112-21-6		
69925-33-3		
70475-38-6		
70664-96-9		
70851-61-5	4-hydroxy-4-methyldec-9-enoic acid lactone	
71159-90-5	alpha,alpha,4-Trimethyl-3-cyclohexene-1-methanethiol	
71298-42-5		1-(4-Isopropylcyclohex-3-enyl) carboxylic acid
71662-27-6	Ethyl O-butyryllactate	Ethyl 2-(butoxycarbonyl)propanoate
72361-41-2		2,6,6 Trimethyl-bicyclo[3.1.1]heptane-3-thiol
72472-02-7		
72854-42-3	2-Hexyl-4-hydroxymethyl-1,3-dioxolan + 2-Hexyl-5-hydroxy-1,3-dioxane	
72869-75-1		
72881-27-7		
72928-48-4		
72928-52-0	2-Pinen-10-ol formate	(6,6-Dimethylbicyclo[3.3.1]hept-2-en-2-yl)methyl formate
73019-14-4		3,7-Dimethyl-2(trans),6-octadienyl 2-ethylbutanoate
73545-18-3	3-Hexenal diethyl acetal	
74183-60-1	Marmarolactone	
74298-89-8		
74367-97-8	Ethyl methyl-p-tolylglycidate	Ethyl 2,3-epoxy-3-(4-methylphenyl)butanoate
74586-09-7		
74595-94-1		
74758-91-1		

CAS	Name	FEMA	CoE	EINECS	Comments
74758-93-3	Methylthiomethyl butyrate			277-989-2	
74808-78-9	4-Butylquinoline				
75048-15-6	1-Isobutoxy-1-isopentyloxyethane		10059	278-063-0	
75853-49-5	12-Methyltridecanal				
75853-50-8	12-Methyltetradecanal				
75853-51-9	13-Methyltetradecanal				
76238-22-7	Non-6-enyl acetate			278-397-7	
76572-48-0	2-Butyl-4,5-dimethylthiazole				
76649-14-4	Oct-3-en-2-ol	3602		278-508-9	
76649-16-6	Ethyl dec-4-enoate	3642	10578	278-509-4	
76649-23-5	Prenyl isobutyrate			278-516-2	
76649-25-7	Nona-3,6-dien-1-ol		10289	278-518-3	
76649-26-8	Nona-3,6-dienyl acetate			278-519-9	
76788-46-0	4,5-Dimethyl-2-ethyl-3-thiazoline	3620		278-551-3	
76801-35-8	3-((Mercapto-1-methylpropyl)thio)2-butanol				
77118-93-5	Methyl 3-acetoxyhexanoate		10755	278-626-0	
77249-20-8	1-Butoxy-1-(2-methylbutoxy)ethane				
77311-02-5	2,4-Dimethyl-3-oxazoline				
77341-67-4	mono-Menth-3-yl succinate	3810			
77974-85-7	S-(Methylthiomethyl) 2-methylpropanethioate				
78417-28-4	Ethyl deca-2,4,7-trienoate		10576		
78818-78-7	Methyl 5-methylfurfuryl disulfide				
78910-33-5	(E,E)-1-(oxo-2,4-decadienyl)-pyrrolidine				
78989-37-4	Ethyl oct-4(trans)-enoate			279-035-0	
80314-58-5	4-Methoxyphenyl methyl ether			279-449-1	
80417-97-6	5,6-Dihydro-3,6-dimethylbenzofuran-2(4H)-one	3755		279-462-2	
80638-48-8	3-(4-Hydroxy-3-methoxyphenyl)propanal			279-524-9	
80866-83-7	2-Phenylpropyl butyrate	2891	285	279-587-2	
81925-81-7	5-Methylhept-2-en-4-one	3761			
81974-61-0	Isopentyl hexadecanoate		10723	279-864-8	
82654-98-6	Butyl vanillyl ether	3796			
83469-85-6	2-Decylfuran				
83861-74-9	Octa-1,5-dien-3-ol				
84559-98-8	3-(Methylthio)propyl 3-methylbutyrate			283-185-2	
84642-60-4	Oct-2(trans)-enyl butyrate	3517	11907	283-437-1	
84642-61-5	sec-Butan-3-onyl butyrate	3332	10525	283-438-7	
84788-08-9	Propyl-2,4-decadienoate	3648	10889	284-147-8	
85554-69-4	Hex-3-enyl decanoate			287-601-3	
85554-72-9	2-Hexenyl octanoate			287-605-5	
85586-67-0	Isobornyl isobutyrate			287-872-8	
86290-21-3	5-Methyl-2-pentylthiazole				
87061-04-9	3-(1-Menthoxy)propane-1,2-diol	3784			
87148-08-1	Methyl propyl tetrasulfide			289-302-3	
89422-42-4	Methyl 3-acetoxybutyrate				
90195-83-8	Allyl methyl tetrasulfide				
91052-68-5	3-Oxooctanoic acid glyceride	3771	10654	293-230-8	
91052-69-6	3-Oxodecanoic acid glyceride	3767	10650	293-231-3	

CAS	Synonyms	Systematic name
74758-93-3		
74808-78-9		
75048-15-6	Acetaldehyde isobutyl isoamyl acetal; Acetaldehyde isobutyl 3-methylbutyl acetal	1-(3-Methylbutoxy)-1-(2-methylpropoxy)ethane
75853-49-5		
75853-50-8		
75853-51-9		
76238-22-7		
76572-48-0		
76649-14-4		
76649-16-6		
76649-23-5		3-Methylbut-2-enyl 2-methylpropanoate
76649-25-7		
76649-26-8		
76788-46-0		
76801-35-8		
77118-93-5		
77249-20-8	Acetaldehyde butyl 2-methylbutyl acetal	
77311-02-5		
77341-67-4	Butanedioic acid, mono[5-methyl 2-(1-methyl-ethyl)cyclohexyl] ester, [1R-(1alpha,2beta,5alpha)]	3-(5-methyl-2-isopropylcyclohexoxycarbonyl)propanoic acid
77974-85-7		
78417-28-4		
78818-78-7		
78910-33-5		
78989-37-4		
80314-58-5	4-Methoxyphenyl methyl ether	
80417-97-6	Dehydromenthofuroolactone	
80638-48-8	Dihydroconiferaldehyde	
80866-83-7	Hydratropyl butyrate	
81925-81-7		
81974-61-0	Isoamyl palmitate	3-Methylbutyl hexadecanoate
82654-98-6	4- (Butoxymethyl)-2-methoxyphenol	Butyl 4-hydroxy-3-methoxybenzyl ether
83469-85-6		
83861-74-9		
84559-98-8		
84642-60-4	trans-2-Octenyl butyrate	
84642-61-5	Acetoxy butyrate; AMC butyrate	1-Methyl-2-oxopropyl butanoate
84788-08-9		
85554-69-4		
85554-72-9		
85586-67-0	Isobornyl 2-methylpropionate	1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl 2-methylpropanoate
86290-21-3		
87061-04-9		
87148-08-1		
89422-42-4		
90195-83-8		
91052-68-5	Glyceryl beta-ketooctanoate	
91052-69-6	Glyceryl beta-ketodecanoate	

CAS	Name	FEMA	CoE	EINECS	Comments
91052-70-9	3-Oxododecanoic acid glyceride	3768	10651	293-232-9	
91052-71-0	3-Oxoheptadecanoic acid glyceride	3769	10652	293-233-4	
91052-72-1	3-Oxoheptanoic acid glyceride	3770	10653	293-235-5	
91052-73-2	3-Oxotetradecanoic acid glyceride	3772	10655	293-236-0	
92015-65-1	Hexahydro-3,6-dimethyl-2(3H)-benzofuranone				
92168-98-4	11-Methyldodecanal				
92343-93-6	2-(3-Methyl-1,3-butadienyl)-4-methyltetrahydrofuran				
92345-48-7	Tetrahydrofurfuryl butyrate	3057	11841		
92900-67-9	3,5-Di-isobutyl-1,2,4-trithiolane				
93762-35-7	Isopentyl (3-methylthio)propionate			297-748-5	
93805-23-3	2-Methylbutyl tetradecanoate		10774	298-506-1	
93815-50-0	14-Methylhexadecanal				
93815-51-1	15-Methylhexadecanal				
93905-03-4	2-Isopropyl-(3,5or 6)-methoxy-pyrazine	3358	11344	299-837-4	
94022-04-5	Butyl O-butyrylglycollate		2188	301-496-4	
94022-06-7	Isobornyl phenylacetate		566	301-499-0	
94087-83-9	4-Methoxy-2-methylbutane-2-thiol	3785		301-977-9	
94088-33-2	sec-Hept-4(cis)-enyl acetate			302-032-3	
94089-02-8	1-(2-Thienyl)ethane-1-thiol		11580	302-104-4	
94089-22-2	2-isoPropoxy-3-methyl pyrazine				
94133-92-3	Oct-3-yl 2-methylcrotonate	3676		302-757-5	
94278-26-9	Methyl 3-(furfurylthio)propionate			304-715-1	
94278-27-0	Ethyl 3-(2-furfurylthio)propionate	3674		304-716-7	
94293-57-9	8-Acetylthio-p-menthanone-3	3809		304-949-4	
94944-51-1	2,4,6-Trihydro-2,4,6-trimethyl-1,3,5-dithiazine		11649		
99583-29-6	2-Acetyl-1-pyrroline				
99999-00-3	Potassium 2-(1'-ethoxy)ethoxypropanoate	3752			
99999-26-7	trans-Heptenyl isobutyrate	3494	10663		
100113-53-9	2-Butyrylfuran		11045		
100760-25-6	2,4-Dimethyl-1,3-dioxolane				
101417-25-8	5-Acetyl-2,3-dihydro-1,4-thiazine				
101517-87-7	2-Isobutyldihydro-4,6-dimethyl-1,3,5-dithiazine	3781			
101853-47-8	Methyl 5-hydroxydecanoate				
102871-31-8	3-Pentylthiophene				
104691-40-9	4,6-Dimethyl-2-(1-methylethyl)dihydro-1,3,5-dithiazine	3782			
108499-33-8	Methyl (2-furfurylthio)acetate				
113486-29-6	3-Methylnona-2,4-dione				
115422-59-8	Isoeugenyl butyl ether		11857		
116505-60-3	2,4-Dimethyl(4H)pyrrolidino[1,2e]-1,3,5-dithiazine				
116854-43-4	10-Methyldodecanal				
118869-62-8	Butyl hex-3-enoate				
121312-01-4	Ethyl 4-acetoxyoctanoate				
121432-33-5	Hex-3(cis)-enyl anisate				
127931-21-9	2-Methylpropyl 3-(methylthio)butyrate				
132344-97-9	2-Butyl-4-methyl(4H)pyrrolidino[1,2e]-1,3,5-dithiazine				
139564-42-4	Methyl 3-acetoxy-2-methylbutyrate				
147030-02-2	(E)-1-(1-oxo-2decenyl)-piperidine				
156679-39-9	Menthol ethylene glycol carbonate	3805			

CAS	Synonyms	Systematic name
91052-70-9	Glyceryl beta-ketododecanoate	
91052-71-0	Glyceryl beta-ketohexadecanoate	
91052-72-1	Glyceryl beta-ketohexanoate	
91052-73-2	Glyceryl beta-ketotetradecanoate	
92015-65-1		
92168-98-4		
92343-93-6		
92345-48-7		
92900-67-9		3,5-Di(2-methylpropyl)-1,2,4-trithiolane
93762-35-7		3-Methylbutyl (3-methylthio)propanoate
93805-23-3	Methylbutyl myristate	
93815-50-0		
93815-51-1		
93905-03-4		
94022-04-5		
94022-06-7	exo-2-Bornyl phenylacetate	1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl phenylacetate
94087-83-9		
94088-33-2		1-Methylhex-3(cis)-enyl acetate
94089-02-8	1-(2-Thienyl)ethylmercaptan	
94089-22-2		
94133-92-3	Oct-3-yl tiglate	1-Ethylhexyl 2-methylbut-2(trans)-enoate
94278-26-9		
94278-27-0	Ethyl beta-furfuryl alpha-thiopropionate	
94293-57-9		
94944-51-1		
99583-29-6		
99999-00-3		
99999-26-7	Hept-3(trans)-enyl isobutyrate	Hept-3(trans)-enyl 2-methylpropanoate
100113-53-9	2-Furyl propyl ketone	
100760-25-6		
101417-25-8		
101517-87-7	2(4)-Isobutyl-4(2),6-dimethyldihydro-4H-1,3,5-dithiazine	2-(2-Methylpropyl)dihydro-4,6-dimethyl-1,3,5-dithiazine
101853-47-8		
102871-31-8		
104691-40-9	2(4)-Isopropyl-4(2),6-dimethyldihydro-4H-1,3,5-dithiazine	
108499-33-8		
113486-29-6		
115422-59-8		1-Butoxy-2-methoxy-4-(prop-1-enyl)benzene
116505-60-3		2,4-Dimethyl-1-aza-3,5-dithiabicyclo[4.3.0]nonane
116854-43-4		
118869-62-8		
121312-01-4		
121432-33-5		Hex-3(cis)-enyl(4-methoxy)-benzoate
127931-21-9		
132344-97-9		4-Butyl-2-methyl-1-aza-3,5-dithiabicyclo[4.3.0]nonane
139564-42-4		
147030-02-2		
156679-39-9		

PART 2

FLAVOURING SUBSTANCES

(ordered by CoE number)

CoE	Name	FEMA	EINECS	Comments
587	2-Methyl-3-tolylpropionaldehyde (mixed o,m,p-)	2748		
643	Hex-2(cis)-enyl acetate	2564		
713	Methyl linoleate + linolenate (48:52 mixture)	3411		
2221	Glycyrrhizic acid	2528		(3)
2266	2-Methoxy-(3,5 or 6)-methylpyrazine	3183		
2332	2-,3- and 10-Mercaptopinane	3503		
2332	10-Mercaptopinane	3503		
10004	1-Butoxy-1-isopentyloxyethane			
10024	1,1-Di-isobutoxy-3-methylbutane			
10027	1,1-Di-isobutoxypropane			
10032	1,1-Dipentyloxyethane			
10036	1-Ethoxy-1-isopentyloxypropane			
10038	1-Isobutoxy-1-ethoxypropane			
10042	1-Ethoxy-3-methyl-1-isopentyloxybutane			
10043	1-Ethoxy-2-methyl-1-isopentyloxypropane			
10044	1-Ethoxy-2-methyl-1-propoxypropane			
10045	1-Ethoxy-1-pentyloxybutane			
10055	1-Isobutoxy-1-ethoxy-2-methylpropane			
10057	1-Isobutoxy-1-ethoxy-3-methylbutane			
10058	1-Isobutoxy-1-ethoxypropane			
10060	1-Isobutoxy-1-isopentyloxy-3-methylbutane			
10061	1-Isobutoxy-1-isopentyloxy-2-methylpropane			
10065	1-Isopentyloxy-1-propoxyethane			
10066	1-Isopentyloxy-1-propoxypropane			
10293	Non-3-en-1-ol		233-735-2(Z)	
10344	p-Mentha-1,3-dien-7-al			
10385	2,4-Undecadienal	3422	250-148-7	
10664	Hept-2-enyl isovalerate			
10702	beta-Ionyl acetate			
10752	2-Methoxycinnamyl acetate			
10766	2-Methylbutyl dodecanoate			
10806	sec-Heptyl isovalerate			
11310	6,7-Dihydro-2,5-dimethyl-5H-cyclopentapyrazine			
11329	2-Ethyl-(3,5 or 6)-methoxy-pyrazine (85%) and 2-Methyl-(3,5 or 6)-methoxy-pyrazine (13%)	3280		
11344	2-Isopropyl-(5 or 6)-methoxy-pyrazine	3358		
11475	Ethyl 3-(methylthio)butyrate			
11571	Propyl methanethiosulfinate			
11912	Diallyl pentasulfide	3533		
11912	Diallyl hexasulfide	3533		
11912	Diallyl heptasulfide	3533		

CoE	Synonyms	Systematic name
587	2-Methyl-3-tolyl propanal	2-Methyl-3-(2,3 or 4-methylphenyl)propanal
643	cis-2-Hexenyl acetate; 2-Hexen-1-yl acetate	
713	Methyl octadeca-9(cis),12(cis)-dienoate + Methyl octadeca-9(cis),12(cis),15(cis)-trienoate	
2221	Glycyrrhizin	
2266		
2332		2,6,6 Trimethyl-bicyclo[3.1.1]heptane-(2,3 and 10)-thiol
2332		2,6,6 Trimethyl-bicyclo[3.1.1]heptane-10-thiol
10004	Acetaldehyde butyl isoamyl acetal;	1-Butoxy-1-(3-methylbutoxy)ethane
10024	Isovaleraldehyde di-isobutyl acetal; 3-Methylbutanal diisobutyl acetal	1,1-Di(2-methylpropoxy)-3-methylbutane
10027	Propanal di-isobutyl acetal	1,1-Di(2-methylpropoxy)propane
10032	Acetaldehyde diamyl acetal; Acetaldehyde dipentyl acetal	
10036	Butanal ethyl isoamyl acetal; Butanal ethyl 3-methylbutyl acetal	1-Ethoxy-1-(3-methylbutoxy)propane
10038	Propanal ethyl 3-methylbutyl acetal	1-Ethoxy-1-(2-methylpropoxy)ethane
10042	Isovaleraldehyde ethyl isoamyl acetal; 3-Methylbutanal ethyl 3-methylbutyl acetal	1-Ethoxy-3-methyl-1-(3-methylbutoxy)butane
10043	Isobutanal ethyl isoamyl acetal; 2-Methylpropanal ethyl 3-methylbutyl acetal	1-Ethoxy-2-methyl-1-(3-methylbutoxy)butane
10044	Isobutanal ethyl propyl acetal; 2-Methylpropanal ethyl propyl acetal	
10045	Butanal ethyl amyl acetal; 2,3- Butylene glycol; Dimethyl ethylene glycol	
10055	Isobutanal ethyl isobutyl acetal; 2-Methylpropanal ethyl isobutyl acetal	1-Ethoxy-2-methyl-1-(2-methylpropoxy)propane
10057	Isovaleraldehyde ethyl isobutyl acetal; 3-Methylbutanal ethyl isobutyl acetal	1-Ethoxy-3-methyl-1-(2-methylpropoxy)butane
10058	Propanal ethyl isobutyl acetal	1-Ethoxy-1-(2-methylpropoxy)propane
10060	Isovaleraldehyde isoamyl isobutyl acetal; 3-Methylbutanal isobutyl 3-methylbutyl acetal	3-Methyl-1-(3-methylbutoxy)-1-(2-methylpropoxy)butane
10061	Isobutanal isobutyl isoamyl acetal; 2-Methylpropanal isobutyl 3-methylbutyl acetal	2-Methyl-1-(3-methylbutoxy)-1-(2-methylpropoxy)propane
10065	Acetaldehyde 3-methylbutyl propyl acetal	1-(3-Methylbutoxy)-1-propoxyethane
10066	Propanal 3-methylbutyl propyl acetal	1-(3-Methylbutoxy)-1-propoxypropane
10293		
10344		
10385		
10664		Hept-2-enyl 3-methylbutanoate
10702	beta-Ionol acetate	4-(2,2,6-Trimethylcyclohex-1-enyl)but-3-en-2-yl acetate
10752		3-(2-Methoxyphenyl)prop-2-enyl acetate
10766		
10806		1- Methylhexyl 3-methylbutanoate
11310		
11329		
11344		
11475		
11571		
11912		
11912		
11912		

PART 3

FLAVOURING SUBSTANCES

(ordered alphabetically)

Number	Name	FEMA	EINECS	Comments
1	4-(p-hydroxyphenyl)-2-butanone-beta-D-glucopyranoside			
2	Acetaldehyde 3-methylbutyl pentylacetate			
3	Acetaldehyde di(2-methylbutyl) acetal			
4	Acetaldehyde hexyl 3-methylbutyl acetal			
5	4-Acetyl-2,5-dimethylfuran-3(2H)-one			
6	2-Acetyl-4-ethylthiazole			
7	Allyl pentanoate			
8	Allyl valerate			
9	4-Allyl-2-methoxyphenyl 3-methylbutyrate			
10	Anisaldehyde butane-2,3-diol acetal			
11	Benzyl decanoate			
12	iso-Bornyl-2-methylbutyrate			
13	But-1-enyl methyl sulphide			
14	But-2-en-1,4-lactone			
15	sec-Butyl -2-methylcrotonate			
16	Butyl acetolactate			
17	2-(sec-Butyl)-4,5-dimethylthiazole			
19	2-Butyl-2-methyl-2-butenolate			
20	4-Butylthiazole			
21	Carvyl-3-methylbutyrate			
22	2-Cedren-15-ol			
23	8(14)-Cedrene			
24	2-Cedrene			
25	Citronellyl decanoate			
26	Citronellyl dodecanoate			
28	Cyclotetradecanone			
29	alpha-Damascenone			
30	Dec-2-eno-1,4-lactone			
31	trans-2,trans-4,cis-7-Decatrienal			
32	Decyl isovalerate			
33	Di(2-methylbutyl) malate			
35	1,5-Diacetoxypentane			
36	1,1-Diethoxy-3,7-dimethyloct-6-ene			
37	Diethyl citrate (asymm)			
38	5,6-Dihydro-2,3-dimethylpyrazine			
39	4,5-Dimethyl-2-(4-methoxyphenyl)-1,3-dioxolane			
40	2,3-Dimethyl-2-nonen-4-olide			
41	2,5-Dimethyl-6,7-dihydro 5H-cyclopentapyra?			
42	3,7-Dimethyl-6-octenal diethyl acetal			
43	2,6-Dimethylheptan-2-ol			
44	2,3-Dimethylnon-2-eno-1,4-lactone			
47	7,15-Epoxy-3-caryophyllene			
48	trans-4,5-Epoxy-trans-2-decenal			
49	4,5-Epoxydec-2(trans)-enal			
50	1-Ethoxy-1-isopentyloxyhexane			

Number	Synonyms	Systematic name
1		
2		
3		
4		
5		
6		
7		
8	Allyl pentanoate	
9		
10		4,5-Dimethyl-2-(4-methoxyphenyl)-1,3-dioxolane
11	Benzyl caprate	
12		
13		
14		
15	2- Butyl tiglate	1-Methylpropyl 2-methylbut-2(trans)-enoate
16		
17		2-(1-Methylpropyl)-4,5-dimethylthiazole
19		
20		
21	Carvyl isopentanoate	p-mentha-6,8-dienyl-2-methylbutanoate
22		8-Methoxy-2,2,4-trimethyltricyclo[5,3,1(3,7).0(1,7)]undec-8(9)-ene
23	beta-Cedrene	2,2,4,8-Tetramethyltricyclo[5,3,1(3,7).0(1,7)]undec-4(14)-ene
24		2,2,4,8-Tetramethyltricyclo[5,3,1(3,7).0(1,7)]undec-8(9)-ene
25	Citronellyl caprate	3,7-Dimethyloct-6-enyl decanoate
26	Citronellyl laurate	3,7-Dimethyloct-6-enyl dodecanoate
28		
29		1-(2,6,6-Trimethylcyclohexa-2,4-dienyl)but-2-en-1-one
30		
31		
32		Decyl 3-methylbutanoate
33		Di-(2-methylbutyl) 2-hydroxybutanedioate
35		
36	Citronellal diethyl acetal; 3,7-Dimethyl-6-octenal diethyl acetal	
37		
38		
39		
40		
41		
42		
43		
44		
47		
48		
49		
50	Hexanal ethyl 3-methylbutyl acetal	1-Ethoxy-1-(3-methylbutoxy)hexane

Number	Name	FEMA	EINECS	Comments
51	1-Ethoxy-1-methoxypropane			
52	1-Ethoxy-1-propoxyhexane			
54	S-Ethyl benzothioate			
55	Ethyl vanillin beta-D-glucopyranoside	3801		
56	Ethyl-2-acetylbutyrate			
57	Ethyl-2-pentenoate			
58	Ethyl-3-(methylthio)-2-methylpropionate			
59	Ethyl-3-(methylthio)butyrate			
60	Ethyl-3-acetoxyoctanoate			
61	Ethyl-3-methylthio-2-methylpropanoate			
62	Ethyl-5-(methylthio)pentanoate			
63	Ethyl-5-(methylthio)valerate			
64	Eugenyl isovalerate			
65	Fenchyl formate			
66	Furan-2(5H)-one			
67	Furaneyl butyrate			
68	Furfuryl ethyl ether			
69	Furfuryl-1-methylpropan-2-one disulphide			
70	2-Furfuryl-3-oxo-2-butylidysulphide			
71	3-(Furfuryldithio)-2-methylfuran			
72	1-(2-Furyl)butane-3-thione			
73	Heliotropine butane-2,3-diol acetal			
74	Hept-4-enyl-2 butyrate			
75	Hex-2(trans)-enyl isobutyrate			
76	Hex-2-enyl octanoate			
77	Hex-3(cis)-enyl methyl carbonate			
78	Hex-3-enyl hexadecanoate			
79	Hex-3-enyl-2-ethylbutyrate			
80	Hexadec-7-eno-1,16-lactone			
81	trans-3-Hexenal			
82	Hexyl oleate			
83	Hexyl tiglate			
84	1-Hexyloxy-1-isopentyloxyethane			
85	4-Hydroxy-benzyl ethyl ether			
86	Isobornyl-2-methylbutyrate			
87	Isobutyl-2-methylcrotonate			
88	Isobutyl-3-(methylthio)butyrate			
89	2-Isobutyl-3-thiazoline			
91	2-Isobutyl-4-methylthiazole			
92	N-Isobutylidene furfurylamine			
93	N-Isopentylidene phenethylamine			
94	1-Isopentyloxy-1-pentyloxyethane			
95	Isoprenyl-2-methylbutyrate			
96	Isopropenyl acetate			
97	S-Isopropyl-3-methylbutanethioate			
98	Isopropyl-4-oxovalerate			
99	2-Isopropyl-5-methylphenyl formate			

Number	Synonyms	Systematic name
51	Propanal ethyl methyl acetal	
52	Hexanal ethyl propyl acetal	
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		4-Allyl-2-methoxyphenyl 3-methylbutanoate
65		1,3,3-Trimethyl-bicyclo[2.2.1]heptan-2-yl formate
66	But-2-en-1,4-lactone	
67		2,5-Dimethylfuran-3(2H)-on-4-yl butanoate
68		
69		
70		
71		
72		
73		4,5-Dimethyl-2-(3,4-methylenedioxyphenyl)-1,3-dioxolane
74		1-Methylhex-3-enyl butyrate
75		Hex-2(trans)-enyl 2-methylpropanoate
76		
77		
78	3- Hexenyl palmitate	
79		
80		
81		
82		Hexyl octadec-9-enoate
83		Hexyl 2-methylbut-2(trans)-enoate
84	Acetaldehyde hexyl isoamyl acetal; Acetaldehyde hexyl 3-methylbutyl acetal	1-Hexoxy-1-(3-methylbutoxy)ethane
85		
86		1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl 2-methylbutanoate
87	Isobutyl tiglate	2-Methylpropyl 2-methylbut-2(trans)-enoate
88		2-Methylpropyl 3-(methylthio)butanoate
89		2-(2-Methylpropyl)-2,5-dihydrothiazole
91		2-(2-Methylpropyl)-4-methylthiazole
92		2-Methylpropylidene furfurylamine
93		N-(3-Methylbutylidene) 2-phenylethylamine
94	Acetaldehyde 3-methylbutyl pentyl acetal	1-(3-Methylbutoxy)-1-pentyloxyethane
95		2-Methyl-1,3-butadienyl 2-methylbutanoate
96		1-Methylene-ethyl acetate
97	S-Isopropyl thioisopentanoate	
98	Isopropyl laevulinate	
99		

Number	Name	FEMA	EINECS	Comments
100	Lycine hydrochloride			
101	DL-Menthone-1,2-glycerol ketal	3808		
102	3-Mercapto-2-methyl butyl formate			
103	4-Mercapto-2-methyl-4,5-dihydro-thiophene			
104	3-Mercapto-3-methyl butyl formate			
105	2-Mercaptoacetaldehyde			
106	Mercaptohexan-1-ol			
107	2-Methoxy-4-(prop-1-enyl)phenyl 3-methylbutyrate			
108	4-Methoxybenzyl-2-methylpropionate			
109	2-(4-Methoxyphenoxy)propionic acid			
110	Methyl thio isovalerate			
111	Methyl thio valerate			
112	2-(2-Methyl-1-propenyl)-4,4-dimethyl-1,3-oxathiane			
113	2-Methyl-2-(methylthio)propanal			
114	3-Methyl-2-butenyl 3-methyl-2-butenolate		276-828-3	
115	3-Methyl-2-butenyl 3-methylbutanethioate			
117	3-Methyl-3-buten-1-yl-butanoate			
118	3-Methyl-3-buten-1-yl-hexanoate			
119	2-Methyl-3-furyl-3-oxo-butyl disulphide			
120	2-Methyl-3-furylbutan-3-on-1-yl disulphide			
121	Methyl-3-methylbut-1-butenyl disulphide			
122	2-Methyl-3-thioacetoxytetrahydrofuran			
123	2-Methyl-4,5-dihydro furan 3-thiol			
124	4-Methyl-4-phenylpentan-2-one			
126	2-Methylbut-2(cis)-enoic acid			
127	2-Methylbut-2-enyl formate			
128	3-Methylbut-3-en-1-yl butyrate			
129	3-Methylbut-3-en-1-yl hexanoate			
130	4-Methylheptanoic acid			
133	2-(2-Methylprop-1-enyl)-4,4-dimethyl-1,3-oxathiane			
134	5-Methylthio-2-(methylthio)methylpent-2-enal			
135	Methylthio-2-(propionyloxy)propionate	3790		
136	Myrtenyl-2-methylbutyrate			
137	Myrtenyl-3-methylbutyrate			
138	Non-1-en-3-one			
140	5-Paradol			
141	Pentadecano-1,14-lactone			
142	2,2,4,6,6-Pentamethylheptane-4-thiol			
143	3-Phenylpropyl -3-phenylpropionate			
144	3-Phenylpropyl benzoate			
145	S-Prenyl thioisopentanoate			
146	Prenyl-3-methylbut-2-enoate			
147	Propanal ethyl methyl acetal			
148	2-Propenyl isothiocyanate	2034		
150	2-isoPropyl-5-methylphenyl formate			
151	Sodium diacetate			

Number	Synonyms	Systematic name
100		
101		
102		
103		
104		
105		2-Mercaptoethan-1-al
106		
107	Isoeugenyl isopentanoate	
108		
109	Lactisol	
110		
111		
112		
113		
114		
115		
117		
118		
119		
120	2-Methyl-3-furyl 3-oxobutyl disulfide	
121		
122		
123		
124		
126	Angelic acid	
127		
128		
129		
130		
133		
134		
135		
136		(6,6-Dimethylbicyclo[3.3.1]hept-2-en-2-yl)methyl 2-methylbutanoate
137	Myrtenyl isovalerate	(6,6-dimethyl-bicyclo[3.1.1]hept-2-enyl)methyl isopentanoate
138		
140		1-(4-Hydroxy-3-methoxyphenyl)nonan-3-one
141		
142		
143		
144		
145		3-Methylbut-2-enyl 3-methylbutanethioate
146		3-Methylbut-2-enyl 3-methylbut-2-enoate
147		
148		
150		
151		

Number	Name	FEMA	EINECS	Comments
153	2,4,6-Triethyl-1,3,5-trithiazine			
154	1-(2,6,6-Trimethyl-2,4-cyclohexadienyl)-2-buten-1-one			
155	3,7,11-Trimethyl-2,6,10-dodecatrien-1-yl acet?			
156	Vanillin butyl-2;3-diol acetal			
157	Vanillyl ethyl ether			
158	Viridifloral			

Number	Synonyms	Systematic name
153		
154		
155		
156		
157		
158		2-Formyl-2,6,6,9-tetramethyl-tricyclo[6.3.0.0(5.7)]undecane

PART 4

FLAVOURING SUBSTANCES NOTIFIED IN APPLICATION OF ARTICLE 3(2) LAST INDENT, FOR WHICH THE PROTECTION OF THE INTELLECTUAL PROPERTY RIGHTS OF THE MANUFACTURER HAS BEEN REQUESTED

	Date of receipt of the notification by the Commission
CN001	17.10.1998
CN002	17.10.1998
CN003	17.10.1998
CN004	17.10.1998
CN005	17.10.1998
CN006	17.10.1998
CN007	17.10.1998
CN008	17.10.1998
CN009	17.10.1998
CN010	17.10.1998
CN011	17.10.1998
CN012	17.10.1998
CN013	17.10.1998
CN014	17.10.1998
CN015	17.10.1998
CN016	17.10.1998
CN017	17.10.1998
CN018	17.10.1998
CN019	17.10.1998
CN020	17.10.1998
CN021	17.10.1998
CN022	17.10.1998
CN023	17.10.1998
CN024	17.10.1998
CN025	17.10.1998
CN026	17.10.1998
CN027	17.10.1998
CN028	17.10.1998
CN029	17.10.1998
CN030	17.10.1998
CN031	17.10.1998
CN032	17.10.1998
CN033	17.10.1998
CN034	17.10.1998
CN035	17.10.1998
CN036	17.10.1998

	Date of receipt of the notification by the Commission
CN037	17.10.1998
CN038	17.10.1998
CN039	17.10.1998
CN040	17.10.1998
CN042	17.10.1998
CN043	17.10.1998
CN044	17.10.1998
CN045	17.10.1998
CN046	17.10.1998
CN047	17.10.1998
CN048	17.10.1998
CN049	17.10.1998
CN050	17.10.1998
CN051	17.10.1998
CN052	17.10.1998
CN053	17.10.1998
CN054	17.10.1998
CN055	17.10.1998
CN056	17.10.1998
CN057	17.10.1998
CN058	30.10.1998
CN059	18.09.1998
CN060	26.10.1998
CN061	26.10.1998
CN062	26.10.1998

COMMISSION

COMMISSION DECISION

of 18 July 2000

amending Decision 1999/217/EC adopting a register of flavouring substances used in or on foodstuffs

(notified under document number C(2000) 1722)

(Text with EEA relevance)

(2000/489/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs ⁽¹⁾, and in particular Article 3(2) thereof,

Whereas:

- (1) Pursuant to Article 3(2) of Regulation (EC) No 2232/96, the Commission through Decision 1999/217/EC ⁽²⁾ adopted a register of flavouring substances used in or on foodstuffs.
- (2) It is necessary, in order to proceed with their evaluation, to integrate a number of substances that have not yet been entered in the above register, and to amend a number of entries in the light of new findings.
- (3) For a number of substances, in application of Commission Recommendation 98/282/EC of 21 April 1998 on the ways in which the Member States and signatory States to the European Economic Area should protect intellectual property in connection with the development and manufacture of flavouring substances referred to in Regulation (EC) No 2232/96 of the European Parliament and of the Council ⁽³⁾, the notifying Member

State has indicated that they do not require protection and can therefore be moved to the open parts of the Register.

- (4) Decision 1999/217/EC should therefore be amended accordingly.
- (5) The measures provided for in this Decision are in accordance with the opinion of the Standing Committee for Foodstuffs,

HAS ADOPTED THIS DECISION:

Article 1

Decision 1999/217/EC is hereby amended as shown in the Annex to this Decision.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 18 July 2000.

For the Commission

David BYRNE

Member of the Commission

⁽¹⁾ OJ L 299, 23.11.1996, p. 1.

⁽²⁾ OJ L 84, 27.3.1999, p. 1.

⁽³⁾ OJ L 127, 29.4.1998, p. 32.

ANNEX

1. Part 1 is amended as follows:

(a) The following entries are inserted:

CAS	Name	FEMA	CoE	Einecs	Comments	Synonyms	Systematic name
52-89-1	l-Cysteine hydrochloride		11746	200-157-7	(1)		
52-90-4	l-Cysteine	3263	10464	200-158-2	(1)		
56-40-6	Glycine	3287	11771	200-272-2	(1)		
94-13-3	Propyl 4-hydroxybenzoate	2951	678	202-307-7			
592-98-3	3-Octene						
5090-41-5	9-Octadecenal						
7367-90-0	Ethyl 3-hydroxyoctanoate		10603	230-919-4			
21662-08-8	5-Decenal						
22610-86-2	5-Octen-2-one		11171				
23747-34-4	2-Propionyl-3-methyl-furan		10970				
30086-02-3	3,5-Octadien-2-one		2148				
39924-52-2	Methyl 3-oxo-2-(pent-2-enyl)cyclopentaneacetate	3410	10821	254-705-5			
37160-77-3	3-Hydroxy-2-octanone						
38533-54-9	1,3,5,8-Undecatetraene						
40716-66-3	Trans-3,7,11-trimethyldeca-1,6,10-trien-3-ol			255-053-4			
56554-87-1	16-Octadecenal						
59303-07-0	2-Methyl-3-furfurylthiopyrazine	3189					
72401-53-7	Tannic acid			276-638-0			D-glucose pentakis-[3,4-dihydroxy-5-[(trihydroxy-3,4,5-benzoyl)oxy]benzoate]
136954-20-6	3-Mercapto hexyl acetate	3851					
136954-21-7	3-Mercapto hexyl butyrate	3852					

(b) For the following substances entries in the 'Comments' column shall be amended as follows:

CAS	Comments	CAS	Comments
56-41-7	(1)-(3)	107-95-9	(1)-(3)
56-84-8	(1)-(3)	130-89-2	(2)-(3)
56-85-9	(1)-(3)	130-95-0	(2)-(3)
56-87-1	(1)-(3)	147-85-3	(1)-(3)
56-89-3	(1)-(3)	150-30-1	(1)-(3)
58-08-2	(2)-(3)	302-72-7	(1)-(3)
59-51-8	(1)-(3)	302-84-1	(1)-(3)
60-18-4	(1)-(3)	443-79-8	(1)-(3)
61-90-5	(1)-(3)	516-06-3	(1)-(3)
63-68-3	(1)-(3)	549-56-4	(2)-(3)
67-03-8	(1)-(3)	595-39-1	(1)-(3)
70-54-2	(1)-(3)	657-27-2	(1)-(3)
71-00-1	(1)-(3)	3130-87-8	(1)-(3)
72-18-4	(1)-(3)	3184-13-2	(1)-(3)
73-32-5	(1)-(3)	6119-47-7	(2)-(3)
74-79-3	(1)-(3)	6119-70-6	(2)-(3)
80-68-2	(1)-(3)	7200-25-1	(1)-(3)
83-67-0	(2)-(3)	7549-43-1	(2)-(3)
107-35-7	(1)-(3)	10098-89-2	(1)-(3)

(c) For the CAS No 36413-60-2 the entry in the 'Comments' column shall be deleted.

(d) The two entries shown below are deleted:

CAS	Name	FEMA	CoE	Einecs	Comments	Synonyms	Systematic name
25007-53-8	Ethyl 4-hydroxy-3-methoxybenzyl ether			236-136-4			
132344-97-9	2-Butyl-4-methyl(4H)pyrrolidino[1,2e]-1,3,5-dithiazine						4-Butyl-2-methyl-1-aza-3,5-dithiabicyclo[4.3.0]nonane

(e) The entry for CAS No 13184-86-6 is replaced by the following:

CAS	Name	FEMA	CoE	Einecs	Comments	Synonyms	Systematic name
13184-86-6	Ethyl 4-hydroxy-3-methoxybenzyl ether			236-136-4			

(f) The entry for CAS No 132344-97-9 is replaced by the following:

CAS	Name	FEMA	CoE	Einecs	Comments	Synonyms	Systematic name
132344-97-9	2-Butyl-4-methyl(4H)pyrrolidino[1,2d]-1,3,5-dithiazine						4-Butyl-2-methyl-1-aza-3,5-dithiabicyclo[4.3.0]nonane

2. In Part 2 the entry for CoE 10038 is replaced by the following:

CoE	Name	FEMA	Einecs	Comments	Synonyms	Systematic name
10038	1-Isoamyloxy-1-ethoxypropane				Propanal ethyl 3-methylbutyl acetal	1-Ethoxy-1-(2-methylpropoxy)ethane

3. Part 4 is amended as follows:

(a) The following entry is inserted:

	Date of receipt of the notification by the Commission
CN064	3.2.1999

(b) The following entries are deleted:

	Date of receipt of the notification by the Commission
CN011	17.10.1998
CN020	17.10.1998
CN025	17.10.1998
CN028	17.10.1998
CN029	17.10.1998
CN032	17.10.1998
CN038	17.10.1998
CN040	17.10.1998
CN044	17.10.1998
CN055	17.10.1998
CN056	17.10.1998
CN062	26.10.1998

II

(Acts whose publication is not obligatory)

COMMISSION

COMMISSION DECISION

of 23 January 2002

amending Commission Decision 1999/217/EC as regards the register of flavouring substances used in or on foodstuffs

(notified under document number C(2002) 88)

(Text with EEA relevance)

(2002/113/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs ⁽¹⁾ and in particular Article 3(2) thereof,

Whereas:

- (1) Pursuant to Article 3(2) of Regulation (EC) No 2232/96, the Commission through its Decision 1999/217/EC ⁽²⁾, as amended by Decision 2000/489/EC ⁽³⁾, adopted a register of flavouring substances used in or on foodstuffs.
- (2) According to Commission Regulation (EC) No 1565/2000 of 18 July 2000 laying down the measures necessary for the adoption of an evaluation programme in application of Regulation (EC) No 2232/96 ⁽⁴⁾, new numbers, so called 'FL numbers', should be attributed to each flavouring substance. In addition, all flavouring substances of the register should be subdivided into groups of related substances according to the list of groups as laid down in that Regulation. This

information should be available to the persons placing the substance on the market so that they can fulfil their obligations according to Regulation (EC) No 1565/2000. The register of flavouring substances should therefore provide the new FL numbers and group numbers.

- (3) Parts 1, 2, and 3 of the Register annexed to Decision 1999/217/EC, as amended by Decision 2000/489/EC, should be combined into one part, part A, and the substances should be listed according to their FL numbers. Part 4 of the Register should be replaced by the text in part B of the Register annexed to this Decision.
- (4) Scrutiny of the flavouring substances notified by Member States and laid down in Decision 1999/217/EC revealed a number of inconsistencies in the chemical numbers, names, synonyms and systematic names and identified a number of cases where the same substances appeared under different chemical names in the register. These inconsistencies should be corrected. Where for those inconsistencies for which no final conclusion could be reached at this stage, at least the fact of a possible inconsistency should be mentioned.
- (5) For a number of substances of Decision 1999/217/EC, including confidentially notified substances, certain Member States have withdrawn their respective notifications. These substances should be deleted from the register. Likewise, Member States have notified new substances which in accordance with Article 5(2) of Regulation (EC) No 2232/96 should be included in the evaluation programme and need therefore to be incorporated into the register.

⁽¹⁾ OJ L 299, 23.11.1996, p. 1.

⁽²⁾ OJ L 84, 27.3.1999, p. 1.

⁽³⁾ OJ L 197, 3.8.2000, p. 53.

⁽⁴⁾ OJ L 180, 19.7.2000, p. 8.

(6) According to Article 4(3) of Regulation (EC) No 2232/96, a substance shall be deleted from the register if it is apparent, following the evaluation, that a flavouring substance does not comply with the general use criteria given in the Annex of the said Regulation. The Scientific Committee on Food concluded in its opinions expressed on 26 September 2001 that 4-Allyl-1,2-dimethoxybenzene (methyleugenol) and 1-Allyl-4-methoxybenzene (estragole) are genotoxic. These substances should therefore be deleted from the register.

(7) Decision 1999/217/EC should therefore be amended accordingly.

(8) The measures provided for in this Decision are in accordance with the opinion of the Standing Committee for Foodstuffs,

HAS ADOPTED THIS DECISION:

Article 1

The Register annexed to Decision 1999/217/EC is replaced by the text in the Annex to this Decision.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 23 January 2002

For the Commission

David BYRNE

Member of the Commission

ANNEX

'Register of flavouring substances notified by the Member States pursuant to Article 3(1) of Regulation (EC) No 2232/96 of the European Parliament and the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs

The register of chemically defined flavouring substances has been divided into two distinct parts. Part A lists the substances according to their FL numbers. Part B lists those substances for which confidentiality has been requested by a Member State in order to protect the intellectual property rights of the manufacturer.

In part A, CAS ⁽¹⁾, EINECS ⁽²⁾, CoE ⁽³⁾ and FEMA ⁽⁴⁾ numbers are indicated, where available.

A number in the column "comments" refers to one of the following remarks:

1. Substance which, apart from its flavouring properties, is used for other purposes on or in foodstuffs, and, therefore, may be subject to additional legal provisions.
2. Substance the use of which is subject to restrictive or prohibitive measures in certain Member States.
3. Substance to be given priority in the evaluation programme laid down in Regulation (EC) No 1565/2000.
4. Substance on which additional information is to be submitted.
5. Name, synonyms, systematic names, CAS, EINECS, CoE or FEMA number might contain inconsistencies.

A specific question raised concerned the treatment of salts and other derived compounds from a "generic" substance. Certain substances had been notified with a high degree of precision. Other substances are lacking this detailed identification. On a number of acids or bases, no specific guidance is given on the actual covering of their derived salts. It is provisionally presumed, but only for the purpose of this register, that ammonium, sodium, potassium and calcium salts, as well as chlorides, carbonates and sulphates, are covered by the "generic" substance, providing they have flavouring properties. However, final acceptance will depend of the results of the evaluation, which in these cases should verify carefully the accuracy of such assimilation.

⁽¹⁾ Chemical Abstracts Service.

⁽²⁾ European Inventory of Existing Chemical Substances.

⁽³⁾ Council of Europe.

⁽⁴⁾ Flavour and Extract Manufacturers' Association of the US.

PART A
FLAVOURING SUBSTANCES
(ordered by FL numbers)

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
01.001	31	138-86-3	Limonene	2633	491	205-341-0
01.002	31	99-87-6	1-Isopropyl-4-methylbenzene	2356	620	202-796-7
01.003	31	127-91-3	Pin-2(10)-ene	2903	2114	204-872-5
01.004	31	80-56-8	Pin-2(3)-ene	2902	2113	201-291-9
01.005	31	586-62-9	Terpinolene	3046	2115	209-578-0
01.006	31	99-83-2	alpha-Phellandrene	2856	2117	202-792-5
01.007	31	87-44-5	beta-Caryophyllene	2252	2118	201-746-1
01.008	31	123-35-3	Myrcene	2762	2197	204-622-5
01.009	31	79-92-5	Camphene	2229	2227	201-234-8
01.010	31	1195-32-0	1-Isopropenyl-4-methylbenzene	3144	2260	214-795-9
01.011	31	644-08-6	4-Methyl-1,1'-biphenyl	3186	2292	211-409-0
01.013	31	92-52-4	Biphenyl	3129	10978	202-163-5
01.014	31	90-12-0	1-Methylnaphthalene	3193	11009	201-966-8
01.015	31	100-42-5	Vinylbenzene	3233	11022	202-851-5
01.016	31	495-62-5	1,4(8),12-Bisabolatriene	3331	10979	207-805-8
01.017	31	4630-07-3	Valencene	3443	11030	225-047-6
01.018	31	13877-91-3	beta-Ocimene	3539	11015	237-641-2
01.019	31	99-86-5	alpha-Terpinene	3558	11023	202-795-1
01.020	31	99-85-4	gamma-Terpinene	3559	11025	202-794-6
01.021	31	29350-73-0	delta-Cadinene		10982	249-580-9
01.022	31	469-61-4	alpha-Cedrene		10985	207-418-4
01.023	31	3691-12-1	1(5),11-Guaiadiene		11003	201-860-1
01.024	31	5208-59-3	beta-Bourbonene		11931	
01.025	31	30640-46-1	2-Methyl-1,3-cyclohexadiene		11797	250-269-5
01.026	31	88-84-6	1(5),7(11)-Guaiadiene			201-860-1
01.027	31	17627-44-0	Bisabola-1,8,12-triene			241-610-9
01.028	31	495-61-4	beta-Bisabolene			
01.029	31	13466-78-9	delta-3-Carene	3821	10983	236-719-3
01.030	31	13744-15-5	beta-Cubebene		10989	
01.031	31	30364-38-6	1,2-Dihydro-1,1,6-trimethylnaphthalene			250-150-8
01.032	31	7681-88-1	2,3-Dihydrofarnesene			
01.033	31	590-73-8	2,2-Dimethylhexane			209-689-4
01.034	31	589-43-5	2,4-Dimethylhexane			209-649-6
01.035	31	673-84-7	2,6-Dimethylocta-2,4,6-triene			211-614-5
01.036	31	101-81-5	Diphenylmethane		11847	202-978-6
01.037	31	112-41-4	Dodec-1-ene		10992	203-968-4
01.038	31	112-40-3	Dodecane			203-967-9

FL No	Synonyms	Systematic name	Comments
01.001	1,8(9)-p-Menthadiene; p-Mentha-1,8-diene; 1-Methyl-4-isopropenyl-1-cyclohexene; Dipentene; Carvene; Cinene; Citrene;		5
01.002	p-Cymene; Cymene; p-methyl-isopropylbenzene; 4-isopropyl-1-methylbenzene; Cymol; 4-Methyl-1-isopropylbenzene; 1-Methyl-4-isopropylbenzene		
01.003	beta-Pinene	6,6-Dimethyl-2-methylenebicyclo[3.1.1]heptane	
01.004	alpha-Pinene	2,6,6-Trimethyl-bicyclo[3.1.1]hept-2-ene	
01.005	p-Menth-1,4(8)-diene; 1-Methyl-4-isopropylidene-1-cyclohexene; 1,4(8)-Terpadiene;	p-Mentha-1,4(8)-diene	
01.006	Phellandrene; 2-Methyl-5-isopropyl-1,3-cyclohexadiene; 4-isopropyl-1-methyl-1,5-cyclohexadiene	p-Mentha-1,5-diene	
01.007	Caryophyllene; 2-Methylene-6,10,10-trimethylbicyclo-[7,2,0]-undec-5-ene;	4,11,11-Trimethyl-8-methylene-bicyclo[7.2.0]undec-4(trans)-ene	
01.008	7-Methyl-3-methylene-1,6-octadiene;	7-Methyl-3-methyleneocta-1,6-diene	
01.009	3,3-Dimethyl-2-methylenenorcamphene; 2,2-Dimethyl-3-methylenenorbornane		
01.010	4,alpha-Dimethylstyrene; p-Isopropenyl toluene; 1-Methyl-4-isopropenyl benzene; 2-p-tolyl propene;		
01.011	p-Methyldiphenyl; p-Methylphenylbenzene; Phenyl-p-tolyl; p-Phenyl-toluene;		
01.013	Diphenyl; Phenylbenzene;		4
01.014	alpha-Methylnaphthalene;		
01.015	Styrene; Vinylbenzol; Phenylethene; Phenylethylene;		2, 3
01.016	gamma-Bisabolene; gamma-Bisabolene; 1-Methyl-4-(1,5-dimethyl-1,4-hexadienyl)-1-cyclohexene;	6-Methyl-2-(4-methylcyclohex-3-enylidene)hept-5-ene	
01.017	1,2,3,5,6,7,8a-Octahydro-1,8a-dimethyl-7-isopropenyl naphthalene	1,2-Dimethyl-9-isopropylene-bicyclo[4.4.0]dec-5-ene	
01.018	trans-beta-ocimene; 1,3,6-octatriene, 3,7-dimethyl-;	3,7-Dimethylocta-1,3(trans),6-triene	
01.019	1-Methyl-4-isopropyl-1,3-cyclohexadiene	p-Mentha-1,3-diene	
01.020	1-Methyl-4-isopropyl-1,4-cyclohexadiene; Moslene; Crithmene;	p-Mentha-1,4-diene	
01.021	alpha-, beta-, gamma-, epsilon, delta-Cadiene;	2,3,4,7,8,10-hexahydro-1,6-dimethyl-4-isopropyl-naphthalene	
01.022		2,6,6,8-Tetramethyl-tricyclo[5.3.1.0(1.5)]undec-8-ene	
01.023	1,4-Dimethyl-7-isopropenyl-delta-9,10-octahydroazulene; alpha-Guaiene;	2,8-Dimethyl-5-isopropenyl-bicyclo[5.3.0]dec-1(7)-ene	
01.024		2-Methyl-8-methylene-5-isopropyl-tricyclo[5.3.0.0(2.6)]decane	
01.025	Dihydrotoluene-(1,3);		
01.026	beta-Guaiene; (1S-cis)-1,2,3,4,5,6,7,8-octahydro-7-isopropylidene-1,4-dimethyl-azulene	2,8-Dimethyl-5-isopropylidene-bicyclo[5.3.0] dec-1(7)-ene	
01.027	alpha Bisabolene	6-Methyl-2-(4-methylcyclohex-3-enyl)hepta-2,5-diene	
01.028			
01.029	3-Carene; Isodiprene; d-3-Carene; Car-3-ene; 4,7,7-Trimethyl-3-norcarene; 3,7,7-Trimethylbicyclo[4,1,0]hept-3-ene	3,7,7-trimethyl-bicyclo-[4.1.0] hept-3-ene	
01.030		10-Methyl-4-methylene-7-isopropyl-tricyclo[4.4.0.0(1.5)]decane	
01.031	Dehydroionene		
01.032			
01.033			
01.034			
01.035	allo Ocimene; Allocimene;		
01.036	Benzylbenzene; Phenylbenzyl; 1,1'-methylenebis-benzene;		
01.037	1-Dodecene; Dodecylene;		
01.038	n-Dodecane;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
01.039	31	20307-84-0	delta-Elemene		10996	
01.040	31	502-61-4	alpha-Farnesene	3839	10998	207-948-6
01.041	31	18794-84-8	beta-Farnesene	3839	10999	242-582-0
01.042	31	23986-74-5	Germacra-1(10),4(14),5-triene			
01.043	31	6753-98-6	3,7,10-Humulatriene		11004	229-816-7
01.044	31	1135-66-6	Isolongifolene			214-494-2
01.045	31	5989-27-5	d-Limonene	2633	491	227-813-5
01.046	31	5989-54-8	l-Limonene	2633	491	227-815-6
01.047	31	475-20-7	Longifolene			207-491-2
01.049	31	78-79-5	2-Methylbuta-1,3-diene			201-143-3
01.050	31	589-34-4	3-Methylhexane			209-643-3
01.051	31	91-57-6	2-Methylnaphthalene		11010	202-078-3
01.052	31	10208-80-7	alpha-Murolene		11011	
01.053	31	91-20-3	Naphthalene		11014	202-049-5
01.054	31	629-62-9	Pentadecane			211-098-1
01.055	31	555-10-2	beta-Phellandrene		11017	209-081-9
01.056	31	512-61-8	alpha-Santalene			
01.057	31	629-59-4	Tetradecane			211-096-0
01.058	31	475-03-6	1,2,3,4-Tetrahydro-1,1,6-trimethylnaphthalene			207-490-7
01.059	31	3387-41-5	4(10)-Thujene		11018	222-212-4
01.060	31	508-32-7	1,1,7-Trimethyltricyclo[2.2.1.0.(2.6)]heptane			208-083-7
01.061	31	16356-11-9	Undeca-1,3,5-triene	3795		240-416-1
01.062	31	98-83-9	(1-Methylethenyl)benzene			202-792-5
01.064	31	3338-55-4	cis-3,7-Dimethyl-1,3,6-octatriene			222-081-3
01.065	31	4221-98-1	(R)-5-(1-Methylethyl)-2-methyl-1,3-cyclohexadiene	2856	2117	224-167-6
01.066	31		2-Cedrene			
01.067	31		8(14)-Cedrene			
01.068	31	592-98-3	3-Octene			
01.069	31	38533-54-9	1,3,5,8-Undecatetraene			
02.001	02	78-83-1	2-Methylpropan-1-ol	2179	49	201-148-0
02.002	01	71-23-8	Propan-1-ol	2928	50	200-746-9
02.003	02	123-51-3	Isopentanol	2057	51	204-633-5
02.004	01	71-36-3	Butan-1-ol	2178	52	200-751-6
02.005	01	111-27-3	Hexan-1-ol	2567	53	203-852-3
02.006	01	111-87-5	Octan-1-ol	2800	54	203-917-6
02.007	01	143-08-8	Nonan-1-ol	2789	55	205-583-7
02.008	01	112-53-8	Dodecan-1-ol	2617	56	203-982-0

FL No	Synonyms	Systematic name	Comments
01.039		3-Isopropenyl-1-isopropyl-4-methyl-4-vinylcyclohex-1-ene	
01.040	1,3,6,10-Dodecatetraene, 3,7,11-trimethyl (alpha-isomer)	3,7,11-Trimethyldodeca-1,3,6,10-tetraene	5
01.041	3,7,11-Trimethyl-1,3,6,10-dodecatetraene; 2,6,10-Trimethyl-2,6,9,11-dodecatetraene	7,11-Dimethyl-3-methylene-1,6,10-dodecatriene	5
01.042	Germacrene D	3-Isopropyl-6-methyl-10-methylene-cyclodeca-1,6-diene	
01.043	alpha-Humulene; alpha-Caryophyllene	1,5,5,8-Tetramethylcycloundeca-3,7,10-triene	
01.044		2,2,7,7-Tetramethyltricyclo[6.2.1(1,8),0(1,6)]undec-5-ene	
01.045		p-Mentha-1,8-diene	
01.046	Levo-Limonene;		5
01.047		Decahydro-4,8,8-trimethyl-9-methylene-1,4-methanoazulene	
01.049	Isoprene; 2-Methyl-1,3-butadiene; Beta-methylbivinyll; Isopentadiene; Isopentadiene;		
01.050			
01.051	Beta-methyl naphthalenes; beta-methylnaphthalene		
01.052		2,8-Dimethylene-5-isopropylbicyclo[4.4.0]decane	
01.053	Naphthene; Champhor tar;		
01.054	n-Pentadecane;		
01.055		p-Mentha-1(7),2-diene	
01.056		1,7-Dimethyl-7-(4-methyl-3-pentenyl)tricyclo[2.2.1.0 (2,6)] heptane	
01.057	n-Tetradecane		
01.058	Ionene; 1,1,6- Trimethyltetraline; Frambileen		
01.059		4-Methylene-1-isopropyl-bicyclo[3.1.0] hexane	
01.060	Tricyclene		
01.061			
01.062	2-phenylpropene; beta-phenylpropene; Alpha-Methylstyrol; Isopropylphenylethylene; Methylstyrene;		
01.064			
01.065			5
01.066		2,2,4,8-Tetramethyltricyclo[5,3,1(3,7),0(1,7)]undec-8(9)-ene	
01.067	beta-Cedrene	2,2,4,8-Tetramethyltricyclo[5,3,1(3,7),0(1,7)]undec-4(14)-ene	
01.068			
01.069			
02.001	Isobutanol; Isopropyl carbinol		
02.002	Propylic alcohol;		
02.003	Isoamyl alcohol; Isopentyl alcohol; Amyl iso alcohol; 3-Methyl-1-butanol; Pentyl iso alcohol; Isobutyl carbinol;	3-Methylbutan-1-ol	
02.004	Propyl carbinol; Hydroxybutane; Butyric alcohol		4
02.005	Alcohol C-6; n-Hexyl alcohol; Caproic alcohol; Amyl carbinol; n-Hexanol		
02.006	Alcohol C-8; n-Octyl alcohol; Heptyl carbinol; Caprylic alcohol; Capryl alcohol; pri.-Octyl alcohol;		
02.007	Alcohol C-9; Pelargonic alcohol; Nonalol; Octyl carbinol; Pelargonic alcohol; n-Nonyl alcohol		
02.008	Alcohol C-12; Lauryl alcohol; Lauric alcohol; Dodecyl alcohol; 1-Dodecanol; Undecyl carbinol;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
02.009	01	36653-82-4	Decahexan-1-ol	2554	57	253-149-0
02.010	23	100-51-6	Benzyl alcohol	2137	58	202-859-9
02.011	04	106-22-9	Citronellol	2309	59	203-375-0
02.012	03	106-24-1	Geraniol	2507	60	203-377-1
02.013	06	78-70-6	Linalool	2635	61	201-134-4
02.014	06	98-55-5	alpha-Terpineol	3045	62	202-680-6
02.015	08	89-78-1	Menthol	2665	63	201-939-0
02.016	08	507-70-0	Borneol	2157	64	208-080-0
02.017	22	104-54-1	Cinnamyl alcohol	2294	65	203-212-3
02.018	06	7212-44-4	Nerolidol	2772	67	230-597-5
02.019	15	60-12-8	2-Phenylethan-1-ol	2858	68	200-456-2
02.020	03	2305-21-7	Hex-2-en-1-ol	2562	69	218-972-1
02.021	01	111-70-6	Heptan-1-ol	2548	70	203-897-9
02.022	05	123-96-6	Octan-2-ol	2801	71	204-667-0
02.023	05	3391-86-4	Oct-1-en-3-ol	2805	72	222-226-0
02.024	01	112-30-1	Decan-1-ol	2365	73	203-956-9
02.026	02	106-21-8	3,7-Dimethyloctan-1-ol	2391	75	203-374-5
02.027	04	141-25-3	Rhodinol	2980	76	205-473-9
02.028	06	78-69-3	3,7-Dimethyloctan-3-ol	3060	77	201-133-9
02.029	03	4602-84-0	3,7,11-Trimethyldodeca-2,6,10-trien-1-ol	2478	78	225-004-1
02.030	22	101-85-9	alpha-Pentylcinnamyl alcohol	2065	79	202-982-8
02.031	22	122-97-4	3-Phenylpropan-1-ol	2885	80	204-587-6
02.033	21	93-54-9	1-Phenylpropan-1-ol	2884	82	202-256-0
02.034	21	705-73-7	1-Phenylpentan-2-ol	2953	83	211-887-0
02.035	06	100-86-7	2-Methyl-1-phenylpropan-2-ol	2393	84	202-896-0
02.036	21	2344-70-9	4-Phenylbutan-2-ol	2879	85	219-055-9
02.037	06	10415-87-9	3-Methyl-1-phenylpentan-3-ol	2883	86	233-889-0
02.038	08	1632-73-1	Fenchyl alcohol	2480	87	216-639-5
02.039	23	536-60-7	4-Isopropylbenzyl alcohol	2933	88	208-640-4
02.040	01	71-41-0	Pentan-1-ol	2056	514	200-752-1
02.041	06	75-85-4	2-Methylbutan-2-ol		515	200-908-9
02.042	06	1197-01-9	2-(4-Methylphenyl)propan-2-ol	3242	530	214-817-7
02.043	02	97-95-0	2-Ethylbutan-1-ol		543	202-621-4

FL No	Synonyms	Systematic name	Comments
02.009	Cetyl alcohol; Alcohol C-16; n-hexadecyl alcohol; Palmityl alcohol;		
02.010	alpha-Hydroxytoluene; Phenyl carbinol; Phenylmethanol; Phenylmethyl alcohol		1
02.011		3,7-Dimethyloct-6-en-1-ol	
02.012	2,6-Dimethyl-2,6-octadien-8-ol; trans-3,7-Dimethyl-2,6-octadien-1-ol;	3,7-Dimethylocta-2(trans),6-dien-1-ol	
02.013	2,6-Dimethyl-octadien-2,7-ol-6; 2,6-Dimethyl-2,7-octadien-6-ol; Linalol; Licareol; Coriandrol	3,7-Dimethylocta-1,6-dien-3-ol	
02.014	alpha-Terpineol; 1-Methyl-4-isopropyl-1-cyclohexen-8-ol; alpha-Terpilenoil; Terpineol schlechthin	p-Menth-1-en-8-ol	
02.015	2-Isopropyl-5-methylcyclohexanol; Hexahydrothymol; 5-Methyl-2-isopropylhexahydrophenol; 5-Methyl-2-isopropylcyclohexanol	cis(1,3)-trans(1,4)-Menthan-3-ol	5
02.016	Camphol; Baros; d-Camphanol; 2-Hydroxycamphane; 2-Camphanol; Bornyl alcohol; Borneocamphor	1,7,7-Trimethyl-bicyclo[2.2.1]heptan-2-ol	
02.017	Cinnamic alcohol; gamma-Phenylallyl alcohol; 3-Phenyl-2-propen-1-ol; 2-Propen-1-ol,-3-phenyl;	3-Phenylprop-2-enol	
02.018	3,7,11- Trimethyl-1,6,10-dodecatrien-3-ol; Peruvioil; Dodecatrien; Melaleucol;	3,7,11-Trimethyl-1,6(cis),10-dodecatrien-3-ol	5
02.019	Phenethyl alcohol; beta-Phenethyl alcohol; 1-Phenyl-2-ethanol; 2-Phenylethyl alcohol; Benzyl carbinol		
02.020	2-Hexenol; 3-Propylallyl alcohol		
02.021	Heptyl alcohol; Alcohol C-7; Hydroxyheptane; Enanthyl alcohol; Enanthic alcohol; pri.Heptyl alcohol; Hexyl carbinol; Hydroxyheptane		
02.022	Octyl alcohol sec.; Methyl hexyl carbinol; Capryl alcohol sec.; Hexyl methyl carbinol		
02.023	Amyl vinyl carbinol; (Amylvinylcarbinol); Matsutake alcohol; Matsuka alcohol; n-Pentyl vinyl carbinol		
02.024	Alcohol C-10; n-Decyl alcohol; Nonylacarbinol; Decylic alcohol; Capric alcohol;		
02.026	Tetrahydrogeraniol; Dihydrocitronellol		
02.027	alpha-Citronellol; 2,6-Dimethyl-1-octen-8-ol	3,7-Dimethyloct-7-en-1-ol	
02.028	Tetrahydrolinalool; Tetrahydrolinalol; 1-Ethyl-1,5-dimethyl hexanol		
02.029	Farnesol; 2,6,10-Trimethyl-2,6,10-dodecatrien-12-ol		
02.030	n-Amyl cinnamic alcohol; 2-Amyl-3-phenyl-2-propen-1-ol; 2-Benzylidene-heptanol;	2-Pentyl-3-phenylprop-2-enol	
02.031	Benzylethyl alcohol; Hydrocinnamyl alcohol; Phenylpropyl alcohol; Dihydrocinnamyl alcohol;		
02.033	Phenyl ethyl carbinol; 1-Phenylpropyl alcohol; alpha-Ethylbenzyl alcohol; Ethyl phenyl carbinol		
02.034	alpha-Propylphenethyl alcohol; Benzyl propyl carbinol; Benzylbutyl alcohol; Benzylpropyl carbinol; n-Propyl benzyl carbinol		
02.035	2-Benzyl-2-propanol; 2-Hydroxy-2-methyl-1-phenylpropanone; Benzyl dimethyl carbinol		
02.036	Phenylethyl methyl carbinol; Methyl 2-phenylethyl carbinol;		
02.037	Phenylethyl methyl ethyl carbinol; 3-Methyl-1-phenyl-3-pentanol;		
02.038	2-Fenchanol; alpha-Fenchol; 1,3,3-Trimethyl-2-norbornanol; 1,3,3-Trimethylbicyclo-2,2,1-heptan-2-ol	1,3,3-trimethyl-bicyclo[2.2.1]heptan-2-ol	
02.039	Cuminol; p-Cymen-7-ol; Cuminyll alcohol; Cuminic alcohol; p-Cymen-7-ol;		
02.040	Amyl alcohol; Pentyl alcohol; n-Butyl carbinol		
02.041	t-Amylalcohol		
02.042	p-Cymen-8-ol; p-alpha-alpha-Trimethylbenzyl alcohol; 2-p-Tolyl-2-propanol; 8-Hydroxy p-cymene; Dimethyl p-Tolyl carbinol		
02.043			

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
02.044	05	589-82-2	Heptan-3-ol	3547	544	209-661-1
02.045	05	543-49-7	Heptan-2-ol	3288	554	208-844-3
02.046	05	589-55-9	Heptan-4-ol		555	209-651-7
02.047	09	107-74-4	3,7-Dimethyloctane-1,7-diol	2586	559	203-517-1
02.049	03	7786-44-9	Nona-2,6-dien-1-ol	2780	589	232-097-2
02.050	03	20273-24-9	Pent-2-en-1-ol		665	2164157
02.051	22	10521-91-2	5-Phenylpentan-1-ol	3618	674	234-064-8
02.052	06	75-65-0	2-Methylpropan-2-ol		698	200-889-7
02.053	22	3360-41-6	4-Phenylbutan-1-ol		699	222-128-8
02.054	06	80-53-5	p-Menthane-1,8-diol		701	201-288-2
02.055	02	3452-97-9	3,5,5-Trimethylhexan-1-ol	3324	702	222-376-7
02.056	04	928-96-1	Hex-3(cis)-en-1-ol	2563	750	213-192-8
02.057	01	112-42-5	Undecan-1-ol	3097	751	203-970-5
02.058	03	106-25-2	Nerol	2770	2018	203-378-7
02.059	08	124-76-5	Isoborneol	2158	2020	204-712-4
02.060	07	536-59-4	p-Mentha-1,8-dien-7-ol	2664	2024	208-639-9
02.061	08	619-01-2	Dihydrocarveol	2379	2025	210-575-1
02.062	08	99-48-9	Carveol	2247	2027	202-757-4
02.063	08	2216-52-6	d-Neomenthol	2666	2028	218-691-4
02.064	21	98-85-1	1-Phenylethan-1-ol	2685	2030	202-707-1
02.065	21	7779-78-4	4-Methyl-1-phenylpentan-2-ol	2208	2031	231-939-6
02.066	21	17488-65-2	4-Phenylbut-3-en-2-ol	2880	2032	241-501-6
02.067	05	89-79-2	Isopulegol	2962	2033	201-940-6
02.068	03	107-18-6	Prop-2-en-1-ol		2136	203-470-7
02.070	08	108-93-0	Cyclohexanol		2138	203-630-6
02.071	08	499-69-4	p-Menthan-2-ol	3562	2228	207-885-4
02.072	06	562-74-3	4-Terpinenol	2248	2229	209-235-5
02.073	22	1123-85-9	2-Phenylpropan-1-ol	2732	2257	214-379-7
02.074	04	6126-50-7	Hex-4-en-1-ol	3430	2295	
02.075	08	18675-34-8	neo-Dihydrocarveol		2296	
02.076	02	137-32-6	2-Methylbutan-1-ol		2346	205-289-9
02.077	05	584-02-1	Pentan-3-ol		2349	209-526-7
02.078	01	64-17-5	Ethanol	2419	11891	200-578-6
02.079	05	67-63-0	Isopropanol	2929		200-661-7
02.080	21	536-50-5	1-(p-Tolyl)ethan-1-ol	3139	10197	208-637-8
02.081	05	108-82-7	2,6-Dimethylheptan-4-ol	3140	11719	203-619-6
02.082	02	104-76-7	2-Ethylhexan-1-ol	3151	11763	203-234-3
02.083	08	491-04-3	p-Menth-1-en-3-ol	3179	10248	207-725-3

FL No	Synonyms	Systematic name	Comments
02.044	n-Butyl ethyl carbinol; Ethyl butyl carbinol		
02.045	2-Hydroxyheptane; Amyl methyl carbinol; sec-Heptyl alcohol; Methyl amyl carbinol		
02.046			
02.047	Hydroxycitronellol; 7-Hydroxy-3,7-dimethyloctan-1-ol; Hydroxydihydrocitronellol		
02.049	Nonadienol; Violet leaf alcohol;		
02.050			
02.051	Phenylamyl alcohol		
02.052	1,1-Dimethylethanol; tertButanol; tert. Butanol 1,1-Dimethyl ethanol; tert.-Butanol		
02.053			
02.054	Terpin hydrate; 4-Hydroxy-alpha, alpha, 4-trimethyl cyclohexane methanol; dipentene glycol		
02.055	Trimethylhexyl alcohol; Isononanol		
02.056	Leaf alcohol; beta-gamma-hexenol; cis-3-hexenol; Blatteralkohol; Hex-3-en-1-ol		5
02.057	Alcohol C-11, undecylic; Undecyl alcohol; Decyl carbinol; 1-Hendecanol		
02.058	Nerolol; Neraniol; Nerosol; Cis-3,7-Dimethyl-2,6,octadien-1-ol; Allerol; cis-2,6-Dimethyl-2,6-octadien-8-ol; Nerodol; Neraniol	3,7-Dimethyl-2(cis),6-octadien-1-ol	
02.059	Isocamphol; Borneol(ISO); (iso)-Camphol; Isobornyl alcohol; (exo)-2-Camphanol; (exo)-2-Bornanol; Bornan-2-ol	1,7,7-Trimethylbicyclo[2.2.1]heptan-2-ol	
02.060	Perilla alcohol; Perillyl alcohol; 1-Hydroxymethyl-4-isopropenyl-1-cyclohexene; Dihydrocuminic alcohol		
02.061	8-p-Menthen-2-ol; 6-Methyl-3-isopropenylcyclohexanol	p-Menth-8-en-2-ol	
02.062	p-Mentha-6,8-dien-2-ol; 1-Methyl-4-isopropenyl-6-cyclohexen-2-ol	p-Mentha-1,8-dien-2-ol	
02.063	2-Propyl-iso-5-Methylcyclohexanol; 2-Isopropyl-5-methylcyclohexanol	2-Isopropyl-5-methylcyclohexanol [1S-(1alpha,2alpha,5beta)]-	
02.064	alpha-Methylbenzyl alcohol; Methyl phenyl carbinol; Methylphenyl carbinol; Styrallyl alcohol; 1-Phenyl-1-hydroxyethane;		
02.065	Benzyl isobutyl carbinol; alpha- Isobutylphenethyl alcohol; 2-Methylpropyl benzyl carbinol; 4-Methyl-1-phenyl-2-pentanol		
02.066	Methyl styryl carbinol; alpha- Methylcinnamyl alcohol		
02.067	1-Methyl-4-isopropenylcyclohexan-3-ol; p-Menth-8(9)-en-3-ol	p-Menth-8-en-3-ol	
02.068	Allyl alcohol; 2-Propen-1-ol; 1-Propenol-3; Vinyl carbinol		
02.070	Hexalin; Hexahydrophenol; Hydroxy cyclohexane;		
02.071	Hexahydrocarvacrol; 3-Isopropyl-6-methylcyclohexanol; Carvomenthol; 1-Methyl-4-isopropyl-2-cyclohexanol		5
02.072	4-Carvomenthonol; 1-Methyl-4-isopropylcyclohex-1-en-4-ol; 1-p-Menthen-4-ol; Origanol; 1-Methyl-4-isopropyl	p- Menth-1-en-4-ol	
02.073	Hydratropic alcohol; Hydratropyl alcohol; 2-Phenylpropyl alcohol;		
02.074			
02.075		p-Menth-8-en-2-ol	
02.076			
02.077	Diethyl carbinol		
02.078	Methyl carbinol; Punctilious (USI); Absolute alc.; Anhydrous alc.; Dehydrated alc.; Ethyl hydrate; Ethyl hydroxide		1
02.079	Isopropyl alcohol; Propan-2-ol; Isopropanol; Dimethyl carbinol; Propyl iso alcohol; Propanol(ISO); Petrohol; sec-Propyl alcohol		1
02.080	p-alpha-Dimethylbenzyl alcohol; p-Tolyl methyl carbinol; 1-p-Tolyl-1-ethanol; 4-Toluene; p-Tolyl methyl carbinol	1-(4-Methylphenyl)ethan-1-ol	
02.081	Di-isobutyl carbinol; Diisobutyl carbinol,		
02.082	2-Ethylhexyl alcohol		
02.083	Piperitol		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
02.085	08	546-79-2	Sabinene hydrate	3239	10309	208-911-7
02.086	05	1653-30-1	Undecan-2-ol	3246	11826	216-722-6
02.087	05	628-99-9	Nonan-2-ol	3315	11803	211-065-1
02.088	05	6032-29-7	Pentan-2-ol	3316	11696	227-907-6
02.089	05	623-37-0	Hexan-3-ol	3351	11775	210-790-0
02.090	03	31502-14-4	Non-2(trans)-en-1-ol	3379	10292	250-662-1
02.091	07	515-00-4	Myrtenol	3439	10285	208-193-5
02.092	08	57069-86-0	Dehydrodihydroionol	3446	10195	
02.093	04	35854-86-5	Non-6-en-1-ol	3465	10294	252-764-1
02.094	04	20125-84-2	Oct-3-en-1-ol	3467	10296	243-533-6
02.095	06	18368-91-7	2-Ethylfenchol	3491	10208	242-243-7
02.096	06	586-82-3	1-Terpinenol	3563	10252	209-585-9
02.097	06	138-87-4	beta-Terpineol	3564	10254	205-342-6
02.098	05	589-98-0	Octan-3-ol	3581	11715	209-667-4
02.099	05	616-25-1	Pent-1-en-3-ol	3584	11717	210-472-1
02.100	08	5947-36-4	Pinocarveol	3587	10303	227-705-8
02.101	08	473-67-6	Pin-2-en-4-ol	3594	10304	207-470-8
02.102	05	76649-14-4	Oct-3-en-2-ol	3602		278-508-9
02.103	05	1565-81-7	Decan-3-ol	3605	10194	
02.104	05	4798-44-1	Hex-1-en-3-ol	3608	10220	225-355-0
02.105	08	25312-34-9	4-(2,6,6-Trimethyl-2-cyclohexenyl)but-3-en-2-ol	3624		246-815-7
02.106	08	22029-76-1	4-(2,2,6-Trimethyl-1-cyclohexenyl)but-3-en-2-ol	3625		244-735-7
02.107	08	3293-47-8	Dihydro-beta-ionol	3627		221-957-2
02.108	06	103-05-9	2-Methyl-4-phenylbutan-2-ol	3629	10281	203-074-4
02.109	03	556-82-1	3-Methylbut-2-en-1-ol	3647	11795	209-141-4
02.110	04	36806-46-9	2,6-Dimethylhept-6-en-1-ol	3663		253-223-2
02.111	05	598-75-4	3-Methylbutan-2-ol	3703		209-950-2
02.112	03	41453-56-9	Non-2(cis)-en-1-ol	3720	10292	255-376-0
02.113	04	64275-73-6	Oct-5(cis)-en-1-ol	3722		264-764-9
02.114	07	1901-38-8	2-(2,2,3-Trimethylcyclopent-3-enyl)ethan-1-ol	3741		217-600-5
02.115	02	589-35-5	3-Methylpentan-1-ol	3762	10275	209-644-9
02.118	06	472-97-9	beta-Caryophyllene alcohol		10188	207-458-2
02.119	07	28231-03-0	Cedrenol		10189	248-917-7
02.120	06	77-53-2	Cedrol		10190	201-035-6
02.121	05	78-92-2	Butan-2-ol		11735	201-158-5
02.122	07	3269-90-7	p-Mentha-1,8(10)-dien-9-ol		10239	221-889-3
02.123	06	115-18-4	2-Methylbut-3-en-2-ol		11794	204-068-4
02.124	05	1569-60-4	6-Methylhept-5-en-2-ol		10264	216-377-1
02.125	04	112-43-6	Undec-10-en-1-ol		10319	203-971-0

FL No	Synonyms	Systematic name	Comments
02.085	Sabinenehydrate; Thujan-4-ol	1-Isopropyl-4-methylbicyclo[3.1.0]hexan-4-ol	
02.086	sec-Undecylic alcohol; Methyl nonyl carbinol		
02.087	Methyl-n-Heptyl carbinol; sec-n-Nonanol; Methyl heptyl carbinol		
02.088	sec-Amyl alcohol; alpha-Methyl butanol; Methyl n-propyl carbinol; Methyl n-Propyl carbinol; Propyl methyl carbinol;		
02.089	Ethyl propyl carbinol		
02.090			5
02.091	6,6-Dimethyl-2-oxomethylbicyclo[1,3,3]-hept-2-ene; 10-Hydroxy-2-pinene; 2-pinen-10-ol	2-Hydroxymethyl-6,6-dimethyl-bicyclo[3.1.1]hept-2-ene	
02.092	alpha,2,6,6-Tetramethyl-1,3-cyclohexadien-1-propanol;	4-(2,6,6-Trimethyl-1,3-cyclohexadienyl)-butan-2-ol	
02.093	Cis-6-Nonenol		5
02.094	Cis-3-Octenol		5
02.095	2-Ethyl-1,3,3-trimethyl-2-norbornanol;	2-Ethyl-1,3,3-trimethyl-bicyclo[2.2.1]heptan-2-ol	
02.096	4-Isopropyl-1-methyl-3-cyclohexen-1-ol; 1-Methyl-4-isopropyl-3-cyclohexen-1-ol; p-Menthen-1-ol, p-3-Methenol-1	p-Menth-3-en-1-ol	
02.097	1-Methyl-4-isopropenylcyclohexan-1-ol; 4-Isopropenyl-1-methyl-1-cyclohexanol;	p-Menth-8(10)-en-1-ol	
02.098	Ethyl n-amyl carbinol; amylethylcarbinol; d-n-octanol; Amyl ethyl carbinol;		
02.099	B-Pentenol; Vinyl ethyl carbinol; Ethyl vinyl carbinol		
02.100	2(10)-Pinen-3-ol; 6,6-Dimethyl-3-hydroxy-2-methylenebicyclo[3.1.1]-heptane; 2(10)-Pinenol-3	3-Hydroxy-6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane	
02.101	Verbenol; 4-Hydroxy-2,6,6-trimethylbicyclo[3.1.1]hept-2-ene; d-Verbenol; 2-Pinenol-4	4,6,6-Trimethyl-bicyclo[3.1.1]hept-3-en-2-one	
02.102	trans-3-Octen-2-ol		
02.103	Heptyl ethyl carbinol; Ethyl heptyl carbinol		
02.104	1-Vinyl butan-1-ol; Vinyl propyl carbinol; Propyl vinyl carbinol		
02.105	alpha-Ionol;		
02.106	beta-Ionol;		
02.107	beta-Dihydroionol	4-(2,2,6-Trimethylcyclohex-1-enyl)-butan-2-ol	
02.108	Phenylethyl dimethyl carbinol; 1,1-Dimethyl-3-phenyl-1-propanol; Dimethyl phenylethyl carbinol;		
02.109	Prenol		
02.110			
02.111	Methyl isopropyl carbinol; Isopropyl methyl carbinol		
02.112	z-2-Nonen-1-ol		5
02.113	z-5-Octen-1-ol		
02.114	alpha- Campholenic alcohol; 2-(2,3,3-trimethylcyclopent-3-en-1-yl)ethanol;		
02.115	2-Ethyl-4-butanol		
02.118	Caryolan-1-ol; Isocaryophyllene	4,4,8-Trimethyl-tricyclo[6.3.1.0(2.5)]dodecan-1-ol	
02.119		2,6,6-Trimethyl-tricyclo[5.3.1.0(1.5)]undec-8-en-8-yl methanol	
02.120	Cedarwood oil alcohols; Octahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-6-ol; 8betaH-cedran-8-ol	2,6,6,8-Tetramethyl-tricyclo[5.3.1.0(1.5)]undecan-8-ol	
02.121	2-Hydroxybutane; Butylene hydrate; Methyl Ethyl carbinol; sec-Butyl Alcohol		1, 4
02.122	p-Mentha-1,8-dien-10-ol		
02.123			
02.124			
02.125	Undecen-1-ol; Alcohol C-11; Undecylenic alcohol		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
02.126	01	112-72-1	Tetradecan-1-ol		10314	204-000-3
02.128	23	105-13-5	p-Anisyl alcohol	2099	66	203-273-6
02.129	06	515-69-5	Bisabola-1,1,2-dien-8-ol		10178	208-205-9
02.130	03	6117-91-5	But-2-en-1-ol		11737	228-086-7
02.131	05	598-32-3	But-3-en-2-ol			209-929-8
02.132	09	107-88-0	Butane-1,3-diol			203-529-7
02.133	10	513-85-9	Butane-2,3-diol		10181	208-173-6
02.134	07	4442-79-9	2-Cyclohexylethan-1-ol			224-672-1
02.135	08	96-41-3	Cyclopentanol		10193	202-504-8
02.136	05	51100-54-0	Dec-1-en-3-ol	3824		256-967-6
02.137	03	22104-80-9	Dec-2-en-1-ol		11750	244-784-4
02.138	04	13019-22-2	Dec-9-en-1-ol			235-878-6
02.139	03	18409-21-7	Deca-2,4-dien-1-ol	3911	11748	242-291-9
02.140	06	2270-57-7	1,2-Dihydrolinalool			
02.141	07	128-50-7	2-(6,6-Dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethan-1-ol	3938		204-890-3
02.142	05	464-07-3	3,3-Dimethylbutan-2-ol			207-347-9
02.143	10	76-09-5	2,3-Dimethylbutane-2,3-diol			200-933-5
02.144	06	18479-58-8	2,6-Dimethyloct-7-en-2-ol			242-362-4
02.145	05	29414-56-0	2,6-Dimethylocta-1,5,7-trien-3-ol			249-613-7
02.146	06	29957-43-5	3,7-Dimethylocta-1,5,7-trien-3-ol	3830	10202	249-975-6
02.147	06	151-19-9	3,6-Dimethyloctan-3-ol			205-787-6
02.148	05	10203-28-8	Dodecan-2-ol		11760	233-500-4
02.149	06	639-99-6	Elemol		10205	211-360-5
02.150	06	1113-21-9	Geranyl linalool			214-201-8
02.151	03	33467-76-4	Hept-2-en-1-ol		11773	251-534-8
02.152	04	10606-47-0	Hept-3-en-1-ol		10219	
02.153	03	33467-79-7	Hepta-2,4-dien-1-ol			251-535-3
02.154	01	1454-85-9	Heptadecan-1-ol			
02.155	05	4938-52-7	1-Hepten-3-ol		10218	225-579-9
02.156	03	928-94-9	Hex-2(cis)-en-1-ol	3924	69	213-190-7
02.157	03	2305-21-7	Hex-2(trans)-en-1-ol	2562	69	213-191-2
02.158	04	928-97-2	Hex-3(trans)-en-1-ol	2563	750	213-193-3
02.159	04	544-12-7	Hex-3-en-1-ol	2563	750	213-193-3
02.160	04	928-91-6	Hex-4(cis)-en-1-ol			213-187-0
02.161	04	928-92-7	Hex-4(trans)-en-1-ol			213-188-6
02.162	03	111-28-4	Hexa-2,4-dien-1-ol	3922		203-853-9
02.163	05	626-93-7	Hexan-2-ol		11774	210-971-4
02.164	23	530-56-3	4-Hydroxy-3,5-dimethoxybenzyl alcohol			208-485-2
02.165	23	623-05-2	4-Hydroxybenzyl alcohol			210-768-0
02.166	15	501-94-0	2-(4-Hydroxyphenyl)ethan-1-ol		10226	207-930-8
02.167	08	18675-35-9	Isodihydrocarveol			
02.168	06	505-32-8	Isophytol		10233	208-008-8
02.169	08	4621-04-9	4-Isopropylcyclohexan-1-ol			225-035-0
02.170	04	498-16-8	Lavandulol			
02.171	06	498-81-7	p-Menthan-8-ol			207-871-8

FL No	Synonyms	Systematic name	Comments
02.126	Myristic alcohol; Myristyl alcohol; Alcohol C-14;		
02.128	Anisic alcohol; Anise alcohol;	4-Methoxybenzyl alcohol	
02.129	alpha-Bisabolol	6-Methyl-2-(4-methylcyclohex-3-enyl)hept-5-en-2-ol	
02.130			
02.131			
02.132	1,3- Butylene glycol		
02.133	2,3- Butylene glycol; Dimethyl ethylene glycol		
02.134			
02.135	Cyclopentyl alcohol		
02.136			
02.137			
02.138	omega-decenol; Decylenic alcohol		
02.139			5
02.140		3,7-Dimethyloct-6-en-3-ol	
02.141	Nopol; 6,6-Dimethyl-2-norpinene-2-ethanol; 2-Hydroxyethyl-6,6-dimethyl-bicyclo[3,1,1]-hept-2-ene		
02.142	Pinacolyl alcohol; 3,3-Dimethyl-2-butanol; tert-Butyl methyl carbinol		
02.143	Pinacol; Pinacone; 2,3-Dimethyl-2,3-butanediol		
02.144	Dihydromyrcenol; Dihydromyrcenate; Myrcetol; Dimyrcetal;		
02.145	Notrienol		
02.146			5
02.147			
02.148			
02.149		2-(4-Methyl-3-isopropylene-4-vinylcyclohexyl) propan-2-ol	
02.150		3,7,11,15- Tetramethylhexadeca-1,6,10,14-tetraen-3-ol	
02.151			5
02.152			
02.153			
02.154			
02.155			
02.156	2- Hexenol		5
02.157	2- Hexenol		
02.158	Leaf alcohol; beta-gamma-hexenol;		5
02.159	Leaf alcohol; beta-gamma-hexenol; cis-3-hexenol		5
02.160			
02.161			
02.162	Sorbic alcohol; 1-Hydroxy-2,4-hexadiene; Sorbyl alcohol		
02.163			
02.164	Syringic alcohol		
02.165	4-Hydroxybenzenemethanol		
02.166	4-Hydroxyphenethyl alcohol; 4-Hydroxy-benzeneethanol		
02.167		iso-p-Menth-8-en-2-ol	
02.168		3,7,11,15- Tetramethylhexadec-1-en-3-ol	
02.169			
02.170	2-Isopropenyl-5-methyl-4-hexen-1-ol	5-Methyl-2-(1-methyleneethyl)hex-4-en-1-ol	
02.171	Dihydro-alpha-terpineol; p-Menthan-8-ol; 1-Methyl-4-isopropylcyclohexane-8-ol		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
02.173	22	5406-18-8	3-(4-Methoxyphenyl)propan-1-ol			226-463-0
02.174	03	4675-87-0	2-Methylbut-2-en-1-ol		10258	225-127-0
02.175	04	4516-90-9	2-Methylbut-3-en-1-ol		10259	
02.176	04	763-32-6	3-Methylbut-3-en-1-ol		10260	212-110-8
02.177	05	617-29-8	2-Methylhexan-3-ol		10266	210-508-6
02.178	02	818-81-5	2-Methyloctan-1-ol			212-457-5
02.179	02	105-30-6	2-Methylpentan-1-ol		10273	203-285-1
02.180	02	626-89-1	4-Methylpentan-1-ol		10278	210-969-3
02.181	06	590-36-3	2-Methylpentan-2-ol		10274	209-681-0
02.182	05	565-60-6	3-Methylpentan-2-ol		10276	209-281-6
02.183	05	108-11-2	4-Methylpentan-2-ol		10279	203-551-7
02.184	06	77-74-7	3-Methylpentan-3-ol		10277	201-053-4
02.185	06	543-39-5	Myrcenol			208-843-8
02.186	07	514-99-8	Myrtanol			208-191-4
02.187	05	21964-44-3	Non-1-en-3-ol		10291	244-686-1
02.188	03	62488-56-6	Nona-2,4-dien-1-ol	3951	11802	263-571-7
02.189	04	76649-25-7	Nona-3,6-dien-1-ol	3885	10289	278-518-3
02.190	05	624-51-1	Nonan-3-ol		10290	210-850-6
02.191	06	5986-38-9	Ocimenol			227-806-7
02.192	03	22104-78-5	Oct-2-en-1-ol	3887	11804	
02.193	05	4798-61-2	Oct-2-en-4-ol	3888		225-357-1
02.194	05	83861-74-9	Octa-1,5-dien-3-ol			
02.195	04	70664-96-9	Octa-3,5-dien-1-ol			
02.196	01	112-92-5	Octadecan-1-ol			204-017-6
02.197	06	41199-19-3	1,2,3,4,4a,5,6,7-Octahydro-2,5,5-trimethylnaphthalen-2-ol		10173	255-256-8
02.198	09	23433-05-8	Octane-1,3-diol			
02.199	06	5986-55-0	Patchoulol			227-807-2
02.201	04	821-09-0	Pent-4-en-1-ol			212-473-2
02.202	01	629-76-5	Pentadecan-1-ol			211-107-9
02.203	06	617-94-7	2-Phenylpropan-2-ol		11704	210-539-5
02.204	03	150-86-7	Phytol		10302	205-776-6
02.205	23	495-76-1	Piperonyl alcohol		10306	207-808-4
02.206	06	515-03-7	Sclareol		10311	208-194-0
02.207	08	21653-20-3	Thujyl alcohol			244-504-0
02.209	08	116-02-9	3,3,5-Trimethylcyclohexan-1-ol	3962		204-122-7
02.210	03	37617-03-1	Undec-2-en-1-ol			253-569-4
02.211	05	56722-23-7	Undeca-1,5-dien-3-ol			
02.213	23	498-00-0	Vanillyl alcohol	3737	690	207-852-4
02.214	08	89-88-3	Vetiverol		10321	201-949-5
02.215	06	552-02-3	Viridiflorol		10322	209-003-3
02.216	07	77-42-9	12-beta-Santalol	3006	74	201-027-2
02.217	07	115-71-9	12-alpha-Santalol	3006	74	204-102-8

FL No	Synonyms	Systematic name	Comments
02.173			
02.174			
02.175			
02.176			
02.177			
02.178			
02.179			
02.180	Isohexanol;		
02.181	2-Methyl-2-pentanol;		
02.182			
02.183	Methylamyl alcohol; sec-Hexyl alcohol; Methyl isobutyl carbinol;		
02.184			
02.185		7-Methyl-3-methyleneoct-1-en-7-ol	
02.186		2-Hydroxymethyl-6,6-dimethyl-bicyclo[3.1.1]heptane	
02.187	n-Hexyl vinyl carbinol;		
02.188			
02.189			5
02.190	Hexyl ethyl carbinol; 3-Nonanol; Ethyl n-Hexyl carbinol;		
02.191		2,6-Dimethylocta-5,7-dien-2-ol	
02.192			5
02.193	2-Octen-4-ol		5
02.194			
02.195			
02.196	Stearyl alcohol; Octadecanol; Octadecyl alcohol; n-Octadecanol;		
02.197	Ambrinol; 2,5,5-Trimethyl-2-hydroxyoctalin		
02.198	1,3-Octanediol		
02.199	Patchouli alcohol	Octahydro-4,8a,9,9-tetramethyl-1,6-methanonaphthalen-1(2H)-ol	5
02.201	4-Penten-1-ol		
02.202			
02.203	Dimethyl phenyl carbinol; Phenyl Isopropanol; Phenyl dimethylcarbinol; Benzenemethanol;		
02.204		3,7,11,15-Tetramethylhexadec-2-en-1-ol	
02.205	Helioalcohol; 1,3-Benzodioxole-5-methanol;	3,4-Methylenedioxybenzyl alcohol	
02.206	Labd-14-ene-8,13-diol	4,6,10,10-Tetramethyl-5-(3,3-dimethylpent-4-enyl)-bicyclo[4.4.0]decan-4-ol	
02.207		1-Isopropyl-4-methylbicyclo[3.1.0]hexan-3-ol	5
02.209	Cyclonol; Homomenthol;		
02.210			
02.211			
02.213		4-Hydroxy-3-methoxybenzyl alcohol	
02.214	Vetivenol; Vetivol	2-Hydroxymethyl-6-methyl-9-(1-methylen-ethyl)-bicyclo[5.3.0]decane and 2-Hydroxymethylisoprop-5-enyl-tricyclo[6.2.1.0(3.7)]undecane	
02.215		2,6,6,9-tetramethyl-tricyclo[6.3.0.0(5.7)]undecan-2-ol	
02.216	beta-Santalol		4, 5
02.217	alpha-Santalol		4, 5

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
02.218	08	1490-04-6	DL-Menthol	2665	63	216-074-4
02.219	06	13254-34-7	2,6-Dimethyl-2-heptanol			236-244-1
02.220	08	20752-34-5	neo-Menthol	2666	2028	
02.222	04	39161-19-8	3-Pentenol-1		10298	
02.224	30	87061-04-9	3-(1-Menthoxy)propane-1,2-diol	3784		289-296-2
02.225	09	111-45-5	2-(2-Propenyloxy)-ethanol			203-871-7
02.226	06	142-50-7	[S-(cis)]-3,7,11-Trimethyl-1,6,10-dodecatrien-3-ol		67	205-540-2
02.228	04	6812-78-8	(S)-3,7-Dimethyl-7-octen-1-ol	2980	76	229-887-4
02.229	04	7540-51-4	(-)-3,7-Dimethyl-6-octen-1-ol	2309	59	231-415-7
02.230	06	8000-41-7	Terpineol			232-268-1
02.231	03	28069-72-9	tr-2, cis-6-Nonadien-1-ol	2780	589	248-816-8
02.232	06	40716-66-3	trans-3,7,11-Trimethyldodeca-1,6,10-trien-3-ol			255-053-4
02.234	04	10340-23-5	3-Nonen-1-ol		10293	
02.237	06	19700-21-1	Geosmin		10216	243-239-8
02.238	08		2-Cedren-15-ol			
02.241	08	2102-59-2	(1R-cis)-2-Methyl-5-(1-methylethenyl)-2-cyclohexen-1-ol			218-270-5
02.242	09	111-76-2	2-Butoxyethan-1-ol		10182	203-905-0
03.001	16	470-82-6	1,8-Cineole	2465	182	207-431-5
03.003	26	539-30-0	Benzyl ethyl ether	2144	521	208-714-6
03.004	26	103-50-4	Dibenzyl ether	2371	11856	203-118-2
03.005	16	2679-87-0	2-Butyl ethyl ether	3131	10911	220-234-9
03.006	26	3558-60-9	2-Methoxyethyl benzene	3198	11812	222-619-7
03.007	16	470-67-7	1,4-Cineole	3658	11225	207-428-9
03.008	16	57709-95-2	2-Acetoxy-1,8-cineole			
03.010	26	588-67-0	Benzyl butyl ether	2139	520	209-626-0
03.011	26	538-86-3	Benzyl methyl ether		10910	208-705-7
03.012	26	54852-64-1	Benzyl octyl ether			
03.015	16	40267-72-9	Ethyl geranyl ether			254-867-7
03.016	16	4747-07-3	Hexyl methyl ether			225-263-0
03.018	16	1634-04-4	2-Methoxy-2-methylpropane			216-653-1
03.019	16	22094-00-4	Prenyl ethyl ether	3777		
03.020	16	14576-08-0	alpha-Terpinyll methyl ether			238-620-0
04.002	25	94-86-0	6-Ethoxyprop-3-enylphenol	2922	170	202-370-0
04.003	18	97-53-0	Eugenol	2467	171	202-589-1
04.004	17	97-54-1	Isoeugenol	2468	172	202-590-7
04.005	25	90-05-1	2-Methoxyphenol	2532	173	201-964-7
04.006	25	89-83-8	Thymol	3066	174	201-944-8
04.007	25	93-51-6	2-Methoxy-4-methylphenol	2671	175	202-252-9
04.008	25	2785-89-9	4-Ethylguaiaicol	2436	176	220-500-4
04.009	25	7786-61-0	2-Methoxy-4-vinylphenol	2675	177	232-101-2

FL No	Synonyms	Systematic name	Comments
02.218			5
02.219			
02.220			5
02.222			
02.224			
02.225	Ethylene glycol monoallyl ether		
02.226			5
02.228			5
02.229			5
02.230	Terpene alcohol;		5
02.231			5
02.232	(E)-nerolidol		
02.234			5
02.237	Decahydronaphtalene	2,6-Dimethyl-bicyclo[4.4.0]decan-1-ol	
02.238		8-Methoxy-2,2,4-trimethyltri-cyclo[5,3,1(3,7),0(1,7)]undec-8(9)-ene	
02.241			5
02.242	Ethylene glycol monobutyl ether		
03.001	Eucalyptol; 1,8-oxido-p-menthane; 1,3,3-Trimethyl-2-oxabicyclo[2.2.2]octane;	1,8-Epoxy-p-menthane	
03.003	Ethyl benzyl ether		
03.004	Benzyl ether; Benzyl oxide		
03.005	Ether, sec-butyl ethyl; Ethyl sec-butyl ether;		
03.006	Methyl phenethyl ether; Phenethyl methyl ether; Phenylethylmethylether		
03.007		1,4-Epoxy-p-menthane	
03.008		2-Acetoxy-1,8-epoxy-p-menthane	
03.010			
03.011			
03.012			
03.015	Geranyl ethyl ether	1-Ethoxy-3,7-dimethylocta-2(trans),6-diene	
03.016			
03.018	Methyl Tertiary Butyl Ether; Methyl t-butyl ether		
03.019	Ethyl 3-methylbut-2-enyl ether	1-Ethoxy-3-methylbut-2-ene	
03.020	4-(1-methoxy-1-methylethyl)-1-methylcyclohexene;	p-Menth-1-en-8-yl methyl ether;	
04.002	1-Ethoxy-2-hydroxy-4-propenylbenzene; 5-Propenylguaethol; 3-Propenyl-6-ethoxyphenol; Hydroxymethyl anethole;		
04.003	4-Allylguaiacol; 2-Methoxy-4-prop-2-enylphenol; 1-Hydroxy-2-methoxy-4-allylbenzene; 1-Hydroxy-2-methoxy-4-propenylbenzen	4-Allyl-2-methoxyphenol	
04.004	4-Propenylguaiaicol; 2-methoxy-4-propenylphenol; 1-Hydroxy-2-methoxy-4-propen-1-ylbenzene;	2-Methoxy-4-(prop-1-enyl)phenol	
04.005	Guaiacol; o-Methylcatechol; 1-Hydroxy-2-methoxybenzene; o-Methoxyphenol; 1-Oxy-2-methoxybenzene		
04.006	1-Methyl-3-hydroxy-4-isopropylbenzene; 3-Hydroxy-p-Cymene; alpha-Cymophenol	2-Isopropyl-5-methylphenol	
04.007	4-Methylguaiaicol; 1-Hydroxy-2-methoxy-4-methylbenzene; 3-Methoxy-4-hydroxytoluene; Creosol		
04.008	1-Hydroxy-2-methoxy-4-ethylbenzene; 2-Methoxy-2-ethylphenol; Homocresol	4-Ethyl-2-methoxyphenol	
04.009	Vinyl guaiacol; 4-Hydroxy-3-methoxystyrene; p-Vinylcatechol-O-methyl ether; p-Vinylguaiaicol		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
04.010	30	4180-23-8	1-Methoxy-4-(prop-1(trans)-enyl)benzene	2086	183	224-052-0
04.013	26	93-16-3	1,2-Dimethoxy-4-(prop-1-enyl)benzene	2476	186	202-224-6
04.014	26	578-58-5	1-Methoxy-2-methylbenzene	2680	187	209-426-3
04.015	26	104-93-8	1-Methoxy-4-methylbenzene	2681	188	203-253-7
04.016	26	151-10-0	1,3-Dimethoxybenzene	2385	189	205-783-4
04.017	30	7784-67-0	1-Ethoxy-2-methoxy-4-(prop-1-enyl)benzene	2472	190	232-072-6
04.018	26	120-11-6	Benzyl isoeugenyl ether	3698	522	204-370-6
04.019	25	95-87-4	2,5-Dimethylphenol	3595	537	202-461-5
04.020	25	108-68-9	3,5-Dimethylphenol		538	203-606-5
04.021	25	620-17-7	3-Ethylphenol		549	210-627-3
04.022	25	123-07-9	4-Ethylphenol	3156	550	204-598-6
04.026	25	108-39-4	3-Methylphenol	3530	617	203-577-9
04.027	25	95-48-7	2-Methylphenol	3480	618	202-423-8
04.028	25	106-44-5	4-Methylphenol	2337	619	203-398-6
04.029	25	120-80-9	Benzene-1,2-diol		680	204-427-5
04.031	25	499-75-2	Carvacrol	2245	2055	207-889-6
04.032	26	100-66-3	Anisole	2097	2056	202-876-1
04.033	26	93-18-5	beta-Naphthyl ethyl ether	2768	2058	202-226-7
04.034	26	150-78-7	1,4-Dimethoxybenzene	2386	2059	205-771-9
04.035	26	101-84-8	Diphenyl ether	3667	2201	202-981-2
04.036	25	91-10-1	2,6-Dimethoxyphenol	3137	2233	202-041-1
04.037	25	622-62-8	4-Ethoxyphenol	3695	2258	210-748-1
04.038	26	4732-13-2	Carvacryl ethyl ether	2246	11840	225-238-4
04.039	26	104-45-0	1-Methoxy-4-propylbenzene	2930	11835	203-203-4
04.040	30	6380-23-0	1,2-Dimethoxy-4-vinylbenzene	3138	11228	228-962-9
04.041	25	108-95-2	Phenol	3223	11811	203-632-7
04.042	25	576-26-1	2,6-Dimethylphenol	3249	11261	209-400-1
04.043	26	1076-56-8	1-Isopropyl-2-methoxy-4-methylbenzene	3436	11245	214-063-9
04.044	25	88-69-7	2-Isopropylphenol	3461	11234	201-852-8
04.045	25	20920-83-6	2-(Ethoxymethyl)phenol	3485	11905	
04.046	25	644-35-9	2-Propylphenol	3522	11908	211-415-3
04.047	25	108-46-3	Benzene-1,3-diol	3589	11250	203-585-2
04.048	25	95-65-8	3,4-Dimethylphenol	3596	11262	202-439-5
04.049	25	2785-87-7	2-Methoxy-4-propylphenol	3598		220-499-0
04.050	25	645-56-7	4-Propylphenol	3649		211-446-2
04.051	18	6627-88-9	4-Allyl-2,6-dimethoxyphenol	3655	11214	229-600-2

FL No	Synonyms	Systematic name	Comments
04.010	trans-Anetole; Isoestragole; 1-Methoxy-4-propenylbenzene; 1-Propene, 1-(4-methoxyphenyl); 4-Methoxy-1-propenylbenzene; Anise camphor		5
04.013	Methyl isoeugenol; 1,2-Dimethoxy-4-propenylbenzene; 4-Propenylveratrole; 1,2-Dimethoxy-4-propen		
04.014	o-Methylanisole; o-Cresyl methyl ether; 2-Methoxy toluene; o-Methoxytoluene; methyl o-Tolyl ether		
04.015	p-Methylanisole; o-Methyl-p-Cresol; 4-Methoxytoluene; Methyl p-tolyl ether; p-Cresyl methyl ether; p-Methoxytoluene		
04.016	m-Dimethoxybenzene; Resorcinol dimethyl ether; Dimethyl resorcinol;		
04.017	Ethyl isoeugenyl ether; 1-Ethoxy-2-methoxy-4-benzene; 2-Ethoxy-5-propenylanisole; Ethyl isoeugenol		
04.018	Benzyl isoeugenol; Isoeugenyl benzyl ether; Benzyl 2-methoxy-4-propenylphenyl ether; 1-Benzyloxy-2-methoxy-4-propenylbenzene;	Benzyl 2-methoxy-4-prop-1-enylphenyl ether	
04.019	1-Hydroxy-2,5-dimethylbenzene;		
04.020			
04.021			
04.022	4-Hydroxyethylbenzene		
04.026	m-Cresol; 1-Hydroxy-3-methylbenzene; 1-Methyl-3-hydroxybenzene; m-Methylphenol		
04.027	o-Cresol; 1-Hydroxy-2-methylbenzene; 2-Hydroxy-1-methylbenzene; o-Cresylic acid; o-Hydroxytoluene; o-Methylphenol		
04.028	p-Cresol; 4-Hydroxytoluene; 1-Methyl-4-hydroxybenzene; 1-Hydroxy-4-methylbenzene; 4-Cresol; p-Cresylic acid		
04.029	Catechol;		
04.031	2-p-Cymenol; 2-Hydroxy-p-cymenol; 2-Cyclohexen-1-one, 6-methyl-3-(1-methylethyl)-; 2-Hydroxy-p-Cymene; 2-Methyl-5-isopropylphenol;	5-Isopropyl-2-methylphenol	
04.032	Methyl phenyl ether; Phenyl methyl ether;	Methoxybenzene	
04.033	2-Ethoxynaphthalene; Ethyl 2-naphthyl ether; Ethyl beta-Naphthyl ether; Nerolin; Nerolin II		
04.034	p-Dimethoxybenzene; Hydroquinone dimethyl ether; Dimethylhydroquinone; Dimethyl hydroquinone; 4-Methoxyphenyl methyl ether		
04.035	Diphenyl oxide; Phenyl ether		
04.036	2-Hydroxy-1,3-dimethoxybenzene; Pyrogallol dimethyl ether; Syringol		
04.037	Hydroquinone monoethyl ether; 1-Ethoxy-4-hydroxybenzene; p-Ethoxyphenol		
04.038	2-Ethoxy-p-Cymene; Ethyl carvacryl ether	2-Ethoxy-4-isopropyl-1-methylbenzene	
04.039	p-Propylanisole; Dihydroanethole; p-n-Propyl anisole; 4-Propylmethoxybenzene;		
04.040	3,4- Dimethoxystyrene		
04.041	Carbolic acid; Hydroxybenzene; Benzenol; Phenyl hydroxide;		
04.042	2,6-Xylenol; 2-Hydroxy-1,3-dimethylbenzene;		
04.043	Thymol methyl ether; 3- Methoxy-p-cymene; 3-Methoxy-para-Cymene; Thymol methylether		
04.044	Phenol, 2-(1-methylethyl)-, 1-Hydroxy-1-isopropylbenzene; o-Cumenol; o-Isopropylphenol		
04.045			
04.046	1-(2-Hydroxyphenyl)propane		
04.047	Resorcinol; 1,3- Dihydroxybenzene; m-Dihydroxybenzene		
04.048	3,4-Xylenol; 1-Hydroxy-3,4-dimethylbenzene;		
04.049	4-Propyl-ortho-Methoxyphenol; 4-Propylguaicol; 5-Propyl-ortho-Hydroxyanisole; Dihydroeugenol;		
04.050			
04.051	Phenol, 2,6-dimethoxy-4-(2-propenyl)-; 4-Allylsyringol; 4-Methoxyeugenol;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
04.052	25	14059-92-8	4-Ethyl-2,6-dimethoxyphenol	3671	11231	
04.053	25	6638-05-7	4-Methyl-2,6-dimethoxyphenol	3704		229-641-6
04.054	26	2173-57-1	Isobutyl beta-naphthyl ether	3719	11886	218-529-2
04.055	17	20675-95-0	2,6-Dimethoxy-4-prop-1-enylphenol	3728		
04.056	25	6766-82-1	2,6-Dimethoxy-4-propylphenol	3729		
04.057	25	2628-17-3	4-Vinylphenol	3739	11257	220-103-6
04.058	18	501-92-8	4-Allylphenol		11218	207-929-2
04.059	26	6379-73-3	Carvacryl methyl ether		11224	228-959-2
04.060	26	494-99-5	1,2-Dimethoxy-4-methylbenzene			207-796-0
04.061	25	28343-22-8	2,6-Dimethoxy-4-vinylphenol		11229	
04.062	26	91-16-7	1,2-Dimethoxybenzene	3799	10320	202-045-3
04.063	26	6738-23-4	1,3-Dimethyl-4-methoxybenzene	3828		229-794-9
04.064	25	98-54-4	4-(1,1-Dimethylethyl)phenol	3918		202-679-0
04.065	25	526-75-0	2,3-Dimethylphenol		11258	208-395-3
04.066	25	105-67-9	2,4-Dimethylphenol		11259	203-321-6
04.067	26	17600-72-5	1-Ethoxy-2-methoxybenzene			241-571-8
04.068	26	5076-72-2	1-Ethoxy-4-methoxybenzene			225-786-4
04.069	26	1515-95-3	1-Ethyl-4-methoxybenzene			
04.070	25	90-00-6	2-Ethylphenol		11232	201-958-4
04.071	17	115422-59-8	Isoeugenyl butyl ether		11857	
04.072	25	618-45-1	3-Isopropylphenol			210-551-0
04.073	25	99-89-8	4-Isopropylphenol			202-798-8
04.074	26	93-04-9	2-Methoxynaphthalene			202-213-6
04.075	26	2216-69-5	1-Methoxynaphthalene			218-696-1
04.076	25	150-19-6	3-Methoxyphenol			205-754-6
04.077	25	150-76-5	4-Methoxyphenol		11241	205-769-8
04.078	25	88-60-8	5-Methyl-2-(tert-butyl)phenol			201-842-3
04.079	26	1515-81-7	Methyl-4-methoxybenzyl ether			216-161-7
04.080	25	533-31-3	3,4-Methylenedioxyphenol			208-561-5
04.081	25	1195-09-1	5-Methylguaiaicol		11243	214-791-7
04.083	25	123-31-9	Quinol		11249	204-617-8
04.084	26	634-36-6	1,2,3-Trimethoxybenzene			211-207-2
04.085	25	2416-94-6	2,3,6-Trimethylphenol	3963		219-330-3
04.088	30	104-46-1	1-Methoxy-4-(1-propenyl)benzene	2086	183	203-205-5
04.091	25	57726-26-8	Ethyl 4-hydroxybenzyl ether			260-918-4
04.092	25	5355-17-9	4-Hydroxybenzyl methyl ether			226-334-9
04.093	23	82654-98-6	Butyl vanillyl ether	3796		
04.094	25	13184-86-6	Ethyl 4-hydroxy-3-methoxybenzyl ether	3815		236-136-4
05.001	01	75-07-0	Acetaldehyde	2003	89	200-836-8
05.002	01	123-38-6	Propanal	2923	90	204-623-0
05.003	01	123-72-8	Butanal	2219	91	204-646-6
05.004	02	78-84-2	2-Methylpropanal	2220	92	201-149-6
05.005	01	110-62-3	Pentanal	3098	93	203-784-4

FL No	Synonyms	Systematic name	Comments
04.052	4-Ethylsyringol;		
04.053	4-Methylsyringol; 2,6- Dimethoxy-p-cresol;		
04.054	2-Isobutoxynaphthalene; Fragarol	2-Methylpropyl beta-naphthyl ether	
04.055	4-Propenylsyringol; 6-Methoxyisoeugenol;		
04.056	4-Propylsyringol;		
04.057	4-Ethenylphenol; 4-Hydroxystyrene;		
04.058	p-Allylphenol		
04.059	5-Isopropyl-2-methylmethoxy-benzene	4-Isopropyl-2-methoxy-1-methylbenzene	
04.060	Homoveratrol; 3,4- Dimethoxytoluene;		
04.061			
04.062	Veratrole; o-Dimethoxybenzene		
04.063	2,4-Dimethyl-1-methoxybenzene		
04.064	4-tert-Butylphenol; 1-Hydroxy-4-tert-butylbenzene; Ucar butylphenol;		
04.065	2,3-Xylenol; 1-Hydroxy-2,3-dimethylbenzene;		
04.066	2,4-Xylenol; 1-Hydroxy-2,4-Dimethylbenzene; 4,6-Dimethylphenol;		
04.067	Ethyl guaiacol		
04.068	Anisyl ethyl ether		
04.069	4-Ethylanisole		
04.070	Phlorol; 1-ethyl-2-hydroxybenzene;		
04.071		1-Butoxy-2-methoxy-4-(prop-1-enyl) benzene	
04.072			
04.073			
04.074	Yara-yara; beta-Naphthyl methyl ether		
04.075			
04.076	m-Hydroxyanisole		
04.077	p-Hydroxyanisole; Hydroquinone monomethyl ether;		
04.078	6-tert-Butyl-m-cresol;	5-Methyl-2-(1,1-dimethylethyl)phenol;	
04.079			
04.080			
04.081	1-Hydroxy-2-methoxy-5-methylbenzene	2-Methoxy-5-methylphenol	
04.083	Hydroquinone; 1,4-Benzenediol; para-Hydroxyphenol;	1,4- Dihydroxybenzene	
04.084			
04.085	3-Hydropseudocumene		
04.088	Anethole; p-propylanisole; Isostragole; p-propylphenyl methyl ether; Propenylanisole;		5
04.091			
04.092			
04.093	4-(Butoxymethyl)-2-methoxyphenol	Butyl 4-hydroxy-3-methoxybenzyl ether	
04.094		Ethyl 4-hydroxy-3-methoxybenzyl ether	
05.001	Ethanal; Acetic aldehyde		
05.002	Propion aldehyde; Propyl aldehyde; Methylacetaldehyd; Propan-1-al; Aldehyde c-3		
05.003	n-Butyraldehyde; Butyl aldehyde; Butyric aldehyde; n-Butanal; Butan-1-al; n-Butyl aldehyde		
05.004	Isobutanal; Isobutyraldehyde; Butyraldehyde(ISO); Butyl iso aldehyde; Isobutyric aldehyde; Isobutyl aldehyde; Butyric iso aldehyde		
05.005	Valeraldehyde; n-Valeric aldehyde; Amyl aldehyde; Valeric aldehyde; Valeral; Pentan-1-al; Aldehyde c-5		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
05.006	02	590-86-3	3-Methylbutanal	2692	94	209-691-5
05.007	02	97-96-1	2-Ethylbutanal	2426	95	202-623-5
05.008	01	66-25-1	Hexanal	2557	96	200-624-5
05.009	01	124-13-0	Octanal	2797	97	204-683-8
05.010	01	112-31-2	Decanal	2362	98	203-957-4
05.011	01	112-54-9	Dodecanal	2615	99	203-983-6
05.012	09	107-75-5	3,7-Dimethyl-7-hydroxyoctanal	2583	100	203-518-7
05.013	23	100-52-7	Benzaldehyde	2127	101	202-860-4
05.014	22	104-55-2	Cinnamaldehyde	2286	102	203-213-9
05.015	23	123-11-5	4-Methoxybenzaldehyde	2670	103	204-602-6
05.016	23	120-57-0	Piperonal	2911	104	204-409-7
05.017	23	120-14-9	Veratraldehyde	3109	106	204-373-2
05.018	23	121-33-5	Vanillin	3107	107	204-465-2
05.019	23	121-32-4	Ethyl vanillin	2464	108	204-464-7
05.020	03	5392-40-5	Citral	2303	109	226-394-6
05.021	04	106-23-0	Citronellal	2307	110	203-376-6
05.022	23	122-03-2	4-Isopropylbenzaldehyde	2341	111	204-516-9
05.023	02	7779-07-9	2,6-Dimethyloctanal	2390	112	215-328-1
05.024	02	7786-29-0	2-Methyloctanal	2727	113	232-093-0
05.025	01	124-19-6	Nonanal	2782	114	204-688-5
05.026	23	529-20-4	o-Tolualdehyde	3068	115	208-452-2
05.027	23	1334-78-7	Tolualdehyde	3068	115	215-615-1
05.028	23	620-23-5	m-Tolualdehyde	3068	115	210-632-0
05.029	23	104-87-0	p-Tolualdehyde	3068	115	203-246-9
05.030	15	122-78-1	Phenylacetaldehyde	2874	116	204-574-5
05.031	01	111-71-7	Heptanal	2540	117	203-898-4
05.032	01	124-25-4	Tetradecanal	2763	118	204-692-7
05.033	03	10031-88-6	2-Ethylhept-2-enal	2438	120	
05.034	01	112-44-7	Undecanal	3092	121	203-972-6
05.035	04	112-45-8	Undec-10-enal	3095	122	203-973-1
05.036	04	143-14-6	Undec-9-enal	3094	123	205-586-3
05.037	03	4826-62-4	2-Dodecenal	2402	124	225-402-5
05.038	22	93-53-8	2-Phenylpropanal	2886	126	202-255-5
05.039	22	7492-44-6	alpha-Butylcinnamaldehyde	2191	127	231-320-0
05.040	22	122-40-7	alpha-Pentylcinnamaldehyde	2061	128	204-541-5
05.041	22	101-86-0	alpha-Hexylcinnamaldehyde	2569	129	202-983-3
05.042	15	104-09-6	p-Tolylacetaldehyde	3071	130	203-173-2

FL No	Synonyms	Systematic name	Comments
05.006	Isovaleraldehyde; 3-Methylbutylaldehyde; Isoamyl aldehyde; Amyl iso aldehyde; Isovaleric aldehyde; Isovaleraldehyde; Isovaleral		
05.007	2-Ethylbutylaldehyde; Diethyl acetaldehyde		
05.008	Aldehyde C-6; Hexaldehyde; Hexoic aldehyde; Caproic aldehyde; Caproaldehyde; n-Hexaldehyde		
05.009	Aldehyde C-8; Octyl aldehyde; Caprylic aldehyde; Caprylaldehyde; Octylaldehyde; n-Octylaldehyde;		
05.010	Aldehyde C-10; Decyl aldehyde; Capraldehyde; Capric aldehyde; n-Decyl aldehyde		
05.011	Aldehyde C-12; Lauric aldehyde; Lauryl Aldehyde; n-dodecylic aldehyde; Duodecylic aldehyde; Lauraldehyde; Dodecan-1-al;		
05.012	Hydroxycitronellal; 7-hydroxy-3,7-dimethyloctan-1-al; Laurine; Citronellalhydrate,		
05.013	Benzene methylal; Benzene carbonal; Benzoic aldehyde; Benzene carboxaldehyde		
05.014	Cinnamic aldehyde; Phenylacrolein; Cinnamal; 3-Phenylpropenal; 3-Phenyl-2-propen-1-al; β-Phenylacrolein;	3-Phenylprop-2-enal	
05.015	p-Anisaldehyde; aubepine; Anisic aldehyde; Aubepine liquid;		
05.016	Heliotropine; Piperonyl aldehyde; Diooxymethylene protocatechuic aldehyde	3,4-Methylenedioxybenzaldehyde	
05.017	O-Methyl vanillin; p-Veratric aldehyde; Dimethyl ether protocatechualdehyde; 3,4-Dimethoxybenzenecarbonal;	3,4-Dimethoxybenzaldehyde	
05.018	Methyl protocatechuic aldehyde; Protocatechualdehyde-3-methylether; Vanillic aldehyde; Methylprotocatechuic aldehyde;	4-Hydroxy-3-methoxybenzaldehyde	
05.019	Bourbonal; Ethyl protal; 3-Ethoxyprotocatechualdehyde	3-Ethoxy-4-hydroxybenzaldehyde	
05.020	Lemarome; Geranial; 3,7-Dimethyl-2,6-octadienal; Neral	3,7-Dimethylocta-2,6-dienal	
05.021	3,7-Dimethyl-6-octenal; Rhodinal	3,7-Dimethyloct-6-enal	
05.022	Cuminaldehyde; p-isopropylbenzaldehyde; Cumenic aldehyde; Cuminal; Cumaldehyde; p-Propyl iso benzaldehyde		
05.023	Isodecylaldehyde; Decylaldehyde(iso)		
05.024	Methylhexylacetaldehyde; Methyl hexyl acetaldehyde		
05.025	Pelargonic aldehyde; Aldehyde C-9; Pelargonaldehyde; Pelargonic aldehyde; Nonanoic aldehyde		
05.026		2-Methylbenzaldehyde	5
05.027	Toluic aldehyde (mixed 2,3,4)	2-, 3- and 4-Methylbenzaldehyde	
05.028		3-Methylbenzaldehyde	5
05.029		4-Methylbenzaldehyde	5
05.030	alpha-Toluic aldehyde; alpha-Tolualdehyde; Hyacinthin; Phenylacetic aldehyde; Benzylcarboxyaldehyde; 1-Oxo-2-phenylethane		
05.031	Aldehyde C-7; n-Heptaldehyde; Heptyl aldehyde; Heptaldehyde; Enanthaldehyde; Enanthal; Aldehyde Heptan-1-alc-7;		
05.032	Myristaldehyde; Aldehyde C-14; Myristic aldehyde; Tetradecyl aldehyde; Aldehyde c-14 (Myristic); Tetradecan-1-al		
05.033	2-Ethyl-3-butylacrolein		
05.034	Undecanoic aldehyde; Undecylic aldehyde; Hendecanal; Aldehyde c-11 undecylic; n-Undecylaldehyde; Undecan-1-al		
05.035	Undecylenic aldehyde (mixed isomers); Undecenal; Intreleven aldehyde; Aldehyde C-11;		
05.036	Undecylenic aldehyde; Hendecen-9-al; Aldehyde C-11 undecylenic; 9-undecylenic aldehyde		
05.037	3-Nonylacrolein; dodec-2-enal		
05.038	2-Phenylpropionaldehyde, Hydratropaldehyde; alpha-Methyltolualdehyde; alpha-Methylphenylacetaldehyde; alpha-Phenylpropionaldehyde;		
05.039	2-Benzylidene hexanal; Butyl cinnamic aldehyde; alpha-Butyl-beta-phenylacrolein	2-Butyl-3-phenylprop-2-enal	
05.040	alpha-Amylcinnamaldehyde; Amyl cinnamic aldehyde; alpha-amyl-beta-phenyl-acrolein; 2-Benzylidene heptanal; alpha-Pentyl-cinnamaldehyde	2-Pentyl-3-phenylprop-2-enal	
05.041	2-Benzylidene-octanal; alpha-n-Hexyl cinnamic aldehyde; alpha-n-Hexyl-beta-phenyl acrolein	2-Benzylideneoctanal	
05.042		4-Methylphenylacetaldehyde	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
05.095	03	497-03-0	2-Methylcrotonaldehyde	3407	2281	207-833-0
05.096	04	30390-50-2	4-Decenal	3264	2297	244-514-5
05.097	22	2439-44-3	3-Methyl-2-phenylbutyraldehyde	2738	135	219-461-6
05.098	07	29548-14-9	p-Menth-1-en-9-al	3178	10347	249-688-6
05.099	22	21834-92-4	5-Methyl-2-phenylhex-2-enal	3199	10365	244-602-3
05.100	22	26643-91-4	4-Methyl-2-phenylpent-2-enal	3200	10366	247-869-4
05.101	03	764-40-9	Penta-2,4-dienal	3217	11695	
05.102	03	764-39-6	Pent-2-enal	3218	10375	212-120-2
05.103	22	939-21-9	3-Phenylpent-4-enal	3318	10378	213-356-9
05.104	07	116-26-7	2,6,6-Trimethylcyclohexa-1,3-diene-1-carbaldehyde	3389	10383	204-133-7
05.105	03	25409-08-9	2-Butylbut-2-enal	3392	10324	246-950-1
05.106	07	564-94-3	Myrtenal	3395	10379	209-274-8
05.107	03	35158-25-9	2-Isopropyl-5-methylhex-2-enal	3406	10361	252-406-4
05.108	03	13162-46-4	Undeca-2,4-dienal	3422	10385	
05.109	03	2463-77-6	2-Undecenal	3423	11827	219-564-6
05.110	23	15764-16-6	2,4-Dimethylbenzaldehyde	3427		239-856-7
05.111	03	56767-18-1	Octa-2(trans),6(trans)-dienal	3466	10371	260-372-7
05.112	07	472-66-2	2,6,6-Trimethylcyclohex-1-en-1-acetaldehyde	3474	10338	207-454-0
05.113	04	4634-89-3	Hex-4-enal	3496	10337	225-058-6
05.114	03	5362-56-1	4-Methylpent-2-enal	3510	10364	226-348-5
05.115	22	24401-36-3	2-Phenylpent-4-enal	3519	10377	246-224-4
05.116	02	5435-64-3	3,5,5-Trimethylhexanal	3524	10384	226-603-0
05.117	07	2111-75-3	p-Mentha-1,8-dien-7-al	3557	11788	218-302-8
05.118	22	1963-36-6	4-Methoxycinnamaldehyde	3567	11919	217-807-0
05.119	07	4501-58-0	2,2,3-Trimethylcyclopent-3-en-1-yl acetaldehyde	3592	10325	224-815-8
05.120	03	21662-13-5	Dodeca-2,6-dienal	3637		244-515-0
05.121	07	432-25-7	2,6,6-Trimethyl-1-cyclohexen-1-carboxaldehyde	3639	2133	207-081-3
05.122	22	1504-75-2	p-Methylcinnamaldehyde	3640	10352	
05.123	07	55253-28-6	5-Isopropenyl-2-methylcyclopentanecarboxaldehyde	3645		
05.124	03	107-86-8	3-Methylcrotonaldehyde	3646	10354	203-527-6
05.125	03	21662-16-8	Dodeca-2,4-dienal	3670	11758	244-517-1
05.126	03	49576-57-0	2-Methyloct-2-enal	3711	10363	256-386-8
05.127	03	30361-28-5	Octa-2(trans),4(trans)-dienal	3721	11805	250-147-1
05.128	04	41547-22-2	Oct-5(cis)-enal	3749		
05.129	23	135-02-4	2-Methoxybenzaldehyde		10350	205-171-7
05.130	03	17909-77-2	alpha-Sinensal	3141	10380	241-854-6
05.133	07		p-Mentha-1,3-dien-7-al		10344	
05.134	22		2-Methyl-3-tolylpropionaldehyde (mixed o,m,p-)	2748	587	
05.135	03	123-73-9	But-2-enal		11736	204-647-1
05.137	04	21662-09-9	Dec-4(cis)-enal	3264	2297	244-514-5
05.138	04	65405-70-1	Dec-4(trans)-enal			265-741-6
05.139	04	39770-05-3	Dec-9-enal	3912		254-624-5
05.140	03	25152-84-5	Deca-2(trans),4(trans)-dienal	3135	2120	246-668-9
05.141	03	51325-37-2	Deca-2,4,7-trienal			

FL No	Synonyms	Systematic name	Comments
05.095		2-Methylbut-2(trans)-enal	5
05.096	Decenaldehyde, Dec-4-enal (cis),		5
05.097	3-Methyl-2-phenylbutanal; alpha-Isopropylphenylacetaldehyde; alpha-iso-propyl phenylacetaldehyde;		
05.098	Carvomenthénal		
05.099	2-Phenyl-5-methyl-2-hexenal		
05.100			
05.101			
05.102	3-Ethylacrolein;		
05.103	beta-Vinylhydrocinnamaldehyde; 3-Phenyl-3-vinylpropionaldehyde;		
05.104	Safranal; Dehydro-beta-Cyclocitral; 1,1,3-Trimethyl-2-formylcyclohexa-2,4-diene		
05.105	2-Ethylidenehexanal; 2-Ethylidene hexanal		
05.106	Pin-2-en-10-al; Benihinal	2-Formyl-6,6-dimethyl-bicyclo[3.1.1]hept-2-ene	
05.107	2-Isopropyl-5-methyl-2-hexenal		
05.108			5
05.109	2-Undecen-1-al		
05.110	2,4-Xylylaldehyde; 1-Formyl-2,4-dimethylbenzene;		
05.111			
05.112	beta-Homocyclocitral;		
05.113			5
05.114			
05.115			
05.116	Isononylaldehyde; tert-Butylisopentanal		
05.117	Perilla aldehyde; 4-Isopropenyl-1-cyclohexene-1-carboxaldehyde; Perillaldehyde		
05.118	3-(4-Methoxyphenyl)-2-propenal;	3-(4-Methoxyphenyl)prop-2-enal	
05.119	alpha-Campholenic aldehyde; (2,3,3-Trimethylcyclopent-3-en-1-yl-2)acetaldehyde		
05.120			5
05.121		1-Cyclohexene-1-carboxaldehyde, 2,6,6-trimethyl-	5
05.122	3-p-Tolylpropenal; 3-p-Methylphenyl propenal;	3-(4-Methylphenyl)prop-2-enal	
05.123	Photocitral A; Cis-2-Methyl-cis-5-isopropenylcyclopentan-1-carboxaldehyde	5-(1-Methylene-ethyl)-2-methylcyclopentanecarboxaldehyde	
05.124	3-Methyl but-2-enal; Prenal; Senecialdehyde	3-Methylbut-2(trans)-enal	
05.125	E, E-2,4-Dodecadienal		5
05.126			5
05.127	E, E-2,4-Octadienal		
05.128	(Z)-5-Octenal		
05.129	o-methoxybenzaldehyde; o-Anisaldehyde		
05.130	2,6-Dimethyl-10-methylene-2,6,11-dodecatrienal	2,6-Dimethyl-10-methylene dodeca-2,6,11-trienal	5
05.133			
05.134	2-Methyl-3-tolyl propanal	2-Methyl-3-(2,3 or 4-methylphenyl) propanal	5
05.135	Crotonaldehyde		
05.137			5
05.138			
05.139			
05.140	2,4-Decadienal; Deca-2,4-dienal; Heptenyl acrolein		5
05.141			

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
05.142	23	139-85-5	3,4-Dihydroxybenzaldehyde		10328	205-377-7
05.143	04	56134-05-5	2,5-Dimethyl-2-vinylhex-4-enal			260-006-6
05.144	03	20407-84-5	Dodec-2(trans)-enal	2402	124	
05.145	09	107-22-2	Ethanedial			203-474-9
05.147	02	123-05-7	2-Ethylhexanal		10331	204-596-5
05.148	03	19317-11-4	Farnesal			242-957-9
05.149	09	111-30-8	Glutaraldehyde			203-856-5
05.150	03	18829-55-5	Hept-2(trans)-enal	3165	730	242-608-0
05.151	04	69112-21-6	Hex-3(trans)-enal	3923		273-874-6
05.152	01	629-80-1	Hexadecanal		10336	211-111-0
05.153	23	134-96-3	4-Hydroxy-3,5-dimethoxybenzaldehyde		10340	205-167-5
05.154	22	4206-58-0	4-Hydroxy-3,5-dimethoxycinnamaldehyde		10341	
05.155	22	458-36-6	4-Hydroxy-3-methoxycinnamaldehyde		10342	207-278-4
05.156	22	80638-48-8	3-(4-Hydroxy-3-methoxyphenyl)propanal			279-524-9
05.157	07	1335-66-6	Isocyclocitral			215-638-7
05.158	23	591-31-1	3-Methoxybenzaldehyde		10351	209-712-8
05.159	15	5703-26-4	p-Methoxyphenylacetaldehyde			227-191-5
05.160	02	19009-56-4	2-Methyldecanal			242-745-6
05.161	02	116854-43-4	10-Methyldodecanal			
05.162	02	92168-98-4	11-Methyldodecanal			
05.163	02	93815-50-0	14-Methylhexadecanal			
05.164	02	925-54-2	2-Methylhexanal			213-118-4
05.165	02	19269-28-4	3-Methylhexanal			
05.166	02	1119-16-0	4-Methylpentanal		10369	214-273-0
05.167	02	75853-50-8	12-Methyltetradecanal			
05.168	02	75853-51-9	13-Methyltetradecanal			
05.169	02	75853-49-5	12-Methyltridecanal			
05.170	03	106-26-3	Neral	2303	109	203-379-2
05.171	03	2463-53-8	Non-2-enal	3213	733	219-562-5
05.172	03	17587-33-6	Nona-2(trans),6(trans)-dienal	3766		241-557-1
05.173	03	57018-53-8	Nona-2,4,6-trienal			
05.174	04	2100-17-6	Pent-4-enal			218-265-8
05.175	22	3491-63-2	2-Phenylpent-2-enal			
05.176	03	107-02-8	Prop-2-enal			203-453-4
05.177	07	1726-47-2	Pseudo-cyclocitral		11849	
05.178	03	60066-88-8	beta-Sinensal		10381	262-043-3
05.179	03	51534-36-2	Tetradec-2-enal			
05.181	01	10486-19-8	Tridecanal		10382	234-004-0
05.182	07	432-24-6	2,6,6-Trimethylcyclohex-2-ene-1-carboxaldehyde	3639	10326	207-080-8
05.183	07	65405-84-7	4-(2,6,6-Trimethylcyclohexenyl)-2-methylbutanal			265-747-9
05.184	03	53448-07-0	Undec-2(trans)-enal	3423	11827	258-559-3
05.186	03	5577-44-6	2,4-Octadienal	3721	11805	250-147-1
05.188	03	141-27-5	trans-3;7-Dimethylocta-2,6-dienal	2303	109	205-476-5
05.189	03	505-57-7	2-Hexenal	2560	748	208-014-0
05.190	03	2548-87-0	trans-2-Octenal	3215	663	219-833-8
05.191	03	3913-81-3	trans-2-Decenal	2366	2009	223-474-2

FL No	Synonyms	Systematic name	Comments
05.142			
05.143	Neroli aldehyde		
05.144			5
05.145	Glyoxal		
05.147	2-Ethyl hexaldehyde; Butyl ethyl acetaldehyde; Alpha-Ethylcaproaldehyde;		
05.148		3,7,11-Trimethyldodeca-2,6,10-trien-1-one	
05.149	Glutaric dialdehyde; 1,3-Diformylpropane; 1,5-Pentadial;	Pentan-1,5-dial	
05.150	(E)-2-hepten-1-al; 2-Heptenal; beta-Butyl acrolein; trans-hept-2-en-1-al		
05.151			5
05.152			
05.153			
05.154	Sinapaldehyde	3-(4-Hydroxy-3,5-dimethoxyphenyl)prop-2-enal	
05.155		3-(4-Hydroxy-3-methoxyphenyl)prop-2-enal	
05.156	Dihydroconiferaldehyde		
05.157		1,3,5-Trimethylcyclohex-3-ene-1-carbaldehyde	
05.158			
05.159			
05.160			
05.161			
05.162			
05.163			
05.164			
05.165			
05.166	4- Methylvaleraldehyde		
05.167			
05.168			
05.169			
05.170		3,7-Dimethyl-2(cis),6-octadienal	5
05.171	beta-Hexylacrolein; alpha-Nonenyl aldehyde; Nonylenic aldehyde		5
05.172			
05.173			
05.174			
05.175			
05.176			
05.177		2,6,6-Trimethylcyclohex-3-enecarbaldehyde	5
05.178		2,6-Dimethyl-10-methylene dodeca-2,6,11-trienal	
05.179			
05.181			
05.182	beta- Cyclocitral		5
05.183	alpha,2,2,6-Tetramethylcyclohexene butanal		
05.184			5
05.186			5
05.188	Geranial		5
05.189			5
05.190			5
05.191			5

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
05.192	04	4440-65-7	3-Hexenal	3923		224-659-0
05.194	03	5910-87-2	tr-2, tr-4-Nonadienal	3212	732	227-629-5
05.195	03	7069-41-2	trans-2-Tridecenal	3082	2011	230-362-7
05.196	03	30361-29-6	tr-2, tr-4-Undecadienal	3422	10385	250-148-7
05.198	07	58102-02-6	alpha-Methyl ional			261-121-4
05.200	03		trans-2, trans-4, cis-7-Decatrienal			
05.203	04	5090-41-5	9-Octadecenal			
05.206	02	93815-51-1	15-Methylhexadecanal			
06.001	01	105-57-7	1,1-Diethoxyethane	2002	35	203-310-6
06.002	23	1319-88-6	5-Hydroxy-2-phenyl-1,3-dioxane	2129	36	215-294-8
06.003	23	1125-88-8	alpha,alpha-Dimethoxytoluene	2128	37	214-413-0
06.004	03	7492-66-2	Citral diethyl acetal	2304	38	231-323-7
06.005	03	7549-37-3	Citral dimethyl acetal	2305	39	231-434-0
06.006	15	101-48-4	1,1-Dimethoxy-2-phenylethane	2876	40	202-945-6
06.007	15	29895-73-6	Phenylacetaldehyde glyceryl acetal	2877	41	249-934-2
06.008	01	10022-28-3	1,1-Dimethoxyoctane	2798	42	233-018-4
06.009	01	7779-41-1	10,10-Dimethoxydecane	2363	43	231-928-6
06.010	02	7779-94-4	1,1-Diethoxy-3,7-dimethyloctan-7-ol	2584	44	231-945-9
06.011	02	141-92-4	1,1-Dimethoxy-3,7-dimethyloctan-7-ol	2585	45	205-510-9
06.012	23	1333-09-1	Tolualdehyde glyceryl acetal	3067	46	
06.013	22	91-87-2	alpha-Pentylcinnamaldehyde dimethyl acetal	2062	47	202-104-3
06.014	22	5660-60-6	Cinnamaldehyde ethylene glycol acetal	2287	48	227-110-3
06.015	01	534-15-6	1,1-Dimethoxyethane	3426	510	208-589-8
06.016	15	7493-57-4	1-Phenylethoxy-1-propoxy ethane	2004	511	231-327-9
06.017	23	774-48-1	(Diethoxymethyl)benzene		517	212-265-1
06.019	23	7492-39-9	1-Benzyloxy-1-(2-methoxyethoxy)ethane	2148	523	
06.020	01	34764-02-8	1,1-Diethoxydecane		531	252-202-5
06.021	01	688-82-4	1,1-Diethoxyheptane		553	211-707-0
06.023	01	3658-93-3	1,1-Diethoxyhexane		557	222-911-4
06.024	15	68345-22-2	1,1-Di-isobutoxy-2-phenylethane	3384	595	269-851-5
06.025	03	67674-36-6	1,1-Diethoxynona-2,6-diene	3378	660	266-874-2
06.027	15	5468-06-4	4,5-Dimethyl-2-benzyl-1,3-dioxolan	2875	669	

FL No	Synonyms	Systematic name	Comments
05.192			5
05.194			5
05.195			5
05.196			5
05.198		2-Methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-enal	
05.200			
05.203			
05.206			
06.001	Diethyl acetal; Acetaldehyde diethyl acetal; Ethylidene diethyl ether; 1,1-Diethoxyethane.		
06.002	Benzaldehyde glyceryl acetal; 5-Hydroxy-2-phenyl-1,3-dioxan; 2-Phenyl-m-dioxan-5-ol; 4-Hydroxy methyl-2-phenyl-1,3-dioxolan; Benzalglycerin		
06.003	Benzaldehyde dimethyl acetal; 1,1-Dimethoxy phenyl methane		
06.004	3,7-Dimethyl-2,6-octadienal diethyl acetal; 1,1-Diethoxy-3,7-dimethyl-2,6-octadiene	1,1-Diethoxy-3,7-dimethylocta-2,6-diene	
06.005	3,7-Dimethyl-2,6-octadienal dimethyl acetal; 1,1-Dimethoxy-3,7-dimethyl-2,6-octadiene;	1,1-Dimethoxy-3,7-dimethylocta-2,6-diene	
06.006	alpha-Tolyl aldehyde dimethyl acetal; Phenylacetaldehyde dimethyl acetal;		
06.007	5-Hydroxy-2-benzyl-1,3-dioxan; 5-Hydroxymethyl-2-benzyl-1,3-dioxolane	2-Benzyl-4-hydroxy-1,3-dioxane and 2-Benzyl-4-hydroxymethyl-1,3-dioxolane (mixture)	
06.008	Octanal dimethyl acetal; C-8-dimethylacetal; Caprylaldehyde dimethyl acetal; Octaldehyde dimethyl acetal; Resedyl acetal;		
06.009	Decanal dimethyl acetal; Decylaldehyde DMA; Aldehyde C-10 dimethylacetal; 1,1-Dimethoxydecane; Decylaldehyde dimethyl acetal		
06.010	Hydroxycitronellal diethyl acetal; 1,1-Diethoxy-3,7-dimethyl-7-octanol; 8,8-Diethoxy-2,6-dimethyl-2-octanol; 7-Hydroxy-1,1-diethoxy-3,7-dimethyl octane		
06.011	Hydroxycitronellal dimethyl acetal; 8,8-Dimethoxy-2,6-dimethyl-2-octanol; 1,1-Dimethoxy-3,7-dimethyl-7-octanol		
06.012	2-(o-,m-,p-Cresyl)-5-hydroxydioxan; 2-(methylphenyl)-1,3-dioxan-5-ol; 2-5-hydroxymethyldioxolane	2-(2,3 and 4-Methylphenyl)-5-hydroxy-1,3-dioxane and 2-(2,3 and 4-Methylphenyl)-5-hydroxymethyl-1,3-dioxolane (mixture)	
06.013	alpha-n-Amyl-beta-phenylacroleindimethylacetal; 1,1-Dimethoxy-2-amyl-3-phenyl-2-propene;	1,1-Dimethoxy-2-pentyl-3-phenylprop-2-ene	
06.014	2-Styryl-m-dioxolane; 2-Styryl-1,3-dioxolane; Cinnamic aldehyde ethylene glycol acetal;	2-(2-Phenylethylene)-1,3-dioxolane	
06.015	Acetaldehyde dimethyl acetal; Dimethylacetal; Ethylidene dimethyl ether;		
06.016	Acetaldehyde phenethyl propyl acetal; [2-(1-Propoxyethoxy)ethyl]benzene; 1-Phenethoxy-1-propoxyethane; Propyl phenethyl acetal; Benzene, 2-(1-propoxyethoxy)ethyl; Acetal R; Pepital;		
06.017	Benzaldehyde diethyl acetal; 1,1-Diethoxyphenyl methane; Phenyl diethoxy methane; 1,1-Diethoxytoluene;		
06.019	Acetaldehyde benzyl methoxyethyl acetal; Acetaldehyde benzyl beta-methoxyethyl acetal; 1-Benzoyl-1-(2-methoxyethoxy)ethane;		
06.020	Decanal diethyl acetal; Decan-1-al diethyl acetal; Decylic aldehyde diethylacetal;		
06.021	Heptanal diethyl acetal; Oenanthal diethyl acetal;		
06.023	Hexanal diethyl acetal; Hexyl aldehyde diethyl acetal		
06.024	Phenylacetaldehyde di-isobutyl acetal;	1,1-Di(2-methylpropoxy)-2-phenylethane	
06.025	Nonadienyl diethyl acetal		5
06.027	Phenylacetaldehyde 2,3-butylene glycol acetal;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
06.028	01	10032-05-0	1,1-Dimethoxyheptane	2541	2015	233-103-6
06.029	09	72854-42-3	Heptanal glyceryl acetal (mixed 1,2 and 1,3 acetals)	2542	2016	276-947-0
06.030	22	90-87-9	1,1-Dimethoxy-2-phenylpropane	2888	2017	202-022-8
06.031	03	54306-00-2	1,1-Diethoxyhex-2-ene		2135	259-086-5
06.032	23	2568-25-4	4-Methyl-2-phenyl-1,3-dioxolane	2130	2226	219-906-4
06.033	01	871-22-7	1,1-Dibutoxyethane		2341	212-804-0
06.034	01	105-82-8	1,1-Dipropoxyethane		2342	203-335-2
06.035	03	10444-50-5	Citral propylene glycol acetal		2343	233-929-7
06.036	15	64577-91-9	1-Butoxy-1-(2-phenylethoxy)ethane	3125	10007	264-948-9
06.037	04	18492-65-4	1,1-Diethoxyhept-4-ene (cis and trans)	3349	10011	242-376-0
06.038	09	5436-21-5	4,4-Dimethoxybutan-2-one	3381	10029	226-605-1
06.039	30	67715-79-1	1,2-Di((1'-ethoxy)-ethoxy)propane	3534		266-979-3
06.040	09	67715-82-6	1,2,3-Tris[(1'-ethoxy)-ethoxy]propane	3593	11930	
06.041	02		1-Isobutoxy-1-ethoxy-2-methylpropane		10055	
06.042	02		1-Isobutoxy-1-ethoxy-3-methylbutane		10057	
06.043	01		1-Isoamyloxy-1-ethoxypropane		10038	
06.044	01		1-Isobutoxy-1-ethoxypropane		10058	
06.045	02		1-Isobutoxy-1-isopentyloxy-2-methylpropane		10061	
06.046	02		1-Isobutoxy-1-isopentyloxy-3-methylbutane		10060	
06.047	01		1-Isopentyloxy-1-propoxyethane		10065	
06.048	01		1-Isopentyloxy-1-propoxypropane		10066	
06.049	01	77249-20-8	1-Butoxy-1-(2-methylbutoxy)ethane			
06.050	01	57006-87-8	1-Butoxy-1-ethoxyethane		10003	
06.051	01	13535-43-8	1,1-Di-(2-methylbutoxy)ethane			
06.052	02	13262-24-3	1,1-Di-isobutoxy-2-methylpropane		10025	
06.053	01	5669-09-0	1,1-Di-isobutoxyethane		10023	227-129-7
06.054	01	13262-27-6	1,1-Di-isobutoxypentane		10026	
06.055	01	13002-09-0	1,1-Di-isopentyloxyethane		10028	235-839-3
06.056	01	4285-59-0	1,1-Di-isopropoxyethane			
06.057	02	3658-94-4	1,1-Diethoxy-2-methylbutane		10013	
06.058	02	1741-41-9	1,1-Diethoxy-2-methylpropane		10015	217-107-5
06.059	02	3842-03-3	1,1-Diethoxy-3-methylbutane		10014	223-335-6
06.060	03	10602-34-3	1,1-Diethoxybut-2-ene			234-224-7
06.061	01	3658-95-5	1,1-Diethoxybutane		10009	222-913-5
06.062	01	53405-98-4	1,1-Diethoxydodecane			258-541-5
06.063	04	73545-18-3	1,1-Diethoxyhex-3-ene			277-532-7

FL No	Synonyms	Systematic name	Comments
06.028	Heptanal dimethyl acetal; Aldehyde C-7 dimethyl acetal; Heptaldehyde dimethylacetal; Enanthal dimethyl acetal;		
06.029	2-Hexyl-4-hydroxymethyl-1,3-dioxolan + 2-Hexyl-5-hydroxy-1,3-dioxane; 2-Hexyl-4-hydroxy-1,3-dioxane;		
06.030	Phenylpropanal dimethyl acetal; Hydratropic aldehyde dimethyl acetal; 2-Phenylpropionaldehyde dimethyl acetal;		
06.031	2-Hexenal diethyl acetal		
06.032	Benzaldehyde propylene glycol acetal; 4-Methyl-2-phenyl-m-dioxolane; 4-Methyl-2-phenyl-1,3-dioxolan; Benzaldehyde propylene glycol cyclic acetal		
06.033	Acetaldehyde dibutyl acetal		
06.034	n-Propyl acetal; Dipropyl acetal; Acetaldehyde dipropyl acetal;		
06.035		2-(2,6-Dimethylhepta-1,5-dienyl)-4-methyl-1,3-dioxalane	
06.036	Acetaldehyde butyl phenethyl acetal; 2-Butoxy-2-phenylethoxy-ethane		
06.037	4-Heptenal diethyl acetal;		5
06.038	Acetylacetaldehyde dimethyl acetal; 3-Oxobutanal dimethyl acetal; 3-Ketobutyraldehyde, dimethyl acetal;		
06.039	4,6,9-Trimethyl-3,5,8,10-tetraoxadodecane; 3,5,8,10-tetraoxadecane,4,6,9-trimethyl-		
06.040	3,5,9,11-Tetraoxatridecane,7-(1-ethoxyethoxy)-4,10-dimethyl-		
06.041	Isobutanal ethyl isobutyl acetal; 2-Methylpropanal ethyl isobutyl acetal	1-Ethoxy-2-methyl-1-(2-methylpropoxy)propane	
06.042	Isovaleraldehyde ethyl isobutyl acetal; 3-Methylbutanal ethyl isobutyl acetal	1-Ethoxy-3-methyl-1-(2-methylpropoxy)butane	
06.043	Propanal ethyl 3-methylbutyl acetal	1-Ethoxy-1-(2-methylpropoxy)ethane	
06.044	Propanal ethyl isobutyl acetal	1-Ethoxy-1-(2-methylpropoxy)propane	
06.045	Isobutanal isobutyl isoamyl acetal; 2-Methylpropanal isobutyl 3-methylbutyl acetal	2-Methyl-1-(3-methylbutoxy)-1-(2-methylpropoxy)propane	
06.046	Isovaleraldehyde isoamyl isobutyl acetal; 3-Methylbutanal isobutyl 3-methylbutyl acetal	3-Methyl-1-(3-methylbutoxy)-1-(2-methylpropoxy)butane	
06.047	Acetaldehyde 3-methylbutyl propyl acetal	1-(3-Methylbutoxy)-1-propoxyethane	
06.048	Propanal 3-methylbutyl propyl acetal	1-(3-Methylbutoxy)-1-propoxypropane	
06.049	Acetaldehyde butyl 2-methylbutyl acetal		
06.050	Acetaldehyde butyl ethyl acetal		
06.051	Acetaldehyde di(2-methylbutyl) acetal		
06.052	Isobutanal di-isobutyl acetal; 2-Methylpropanal di-sobutyl acetal	1,1-Di(2-methylpropoxy)-2-methylpropane	
06.053	Acetaldehyde di-isobutyl acetal	1,1-Di(2-methylpropoxy)ethane	
06.054	Valeraldehyde di-isobutyl acetal; Pentanal di-sobutyl acetal	1,1-Di(2-methylpropoxy)pentane	
06.055	Acetaldehyde di-isoamyl acetal; Acetaldehyde di(3-methylbutyl) acetal	1,1-Di(3-methylbutoxy)ethane	
06.056	Acetaldehyde di-isopropyl acetal		5
06.057	2-Methylbutanal diethyl acetal		
06.058	Isobutanal diethyl acetal; 2-Methylpropanal diethyl acetal		
06.059	Isovaleraldehyde diethyl acetal; 3-Methylbutanal diethyl acetal		
06.060	2-Butenal diethyl acetal		
06.061	Butanal diethyl acetal		
06.062	Dodecanal diethyl acetal		
06.063	3-Hexenal diethyl acetal		5

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
06.064	01	462-95-3	Diethoxymethane		10012	207-330-6
06.065	01	54815-13-3	1,1-Diethoxynonane		10016	259-360-4
06.066	01	54889-48-4	1,1-Diethoxyoctane			259-385-0
06.067	01	3658-79-5	1,1-Diethoxypentane		10017	222-909-3
06.068	03	3054-95-3	1,1-Diethoxyprop-2-ene		10020	221-276-0
06.069	01	4744-08-5	1,1-Diethoxypropane		10018	225-257-8
06.070	01	53405-97-3	1,1-Diethoxyundecane			258-539-4
06.071	01	5405-58-3	1,1-Dihexyloxyethane		10022	226-458-3
06.072	03	18318-83-7	1,1-Dimethoxyhex-2(trans)-ene			242-204-4
06.073	01	1599-47-9	1,1-Dimethoxyhexane			216-488-5
06.074	01	109-87-5	Dimethoxymethane		10031	203-714-2
06.075	01	26450-58-8	1,1-Dimethoxypentane			247-716-1
06.076	01	4744-10-9	1,1-Dimethoxypropane			225-258-3
06.077	01	3390-12-3	2,4-Dimethyl-1,3-dioxolane			222-221-3
06.078	15	122-71-4	1,1-Diphenethoxyethane			204-568-2
06.079	01	13602-09-0	1-Ethoxy-1-(2-methylbutoxy)ethane		10040	
06.080	15	2556-10-7	1-Ethoxy-1-(2-phenylethoxy)ethane		10049	219-868-9
06.081	04	28069-74-1	1-Ethoxy-1-(3-hexenyloxy)ethane	3775	10034	248-817-3
06.082	01	54484-73-0	1-Ethoxy-1-hexyloxyethane		11948	259-184-8
06.083	01	13442-90-5	1-Ethoxy-1-isopentyloxyethane		10037	236-581-4
06.084	01	10471-14-4	1-Ethoxy-1-methoxyethane		10039	233-959-0
06.085	01	59184-43-9	1-Ethoxy-1-pentyloxyethane		10046	
06.086	01	20680-10-8	1-Ethoxy-1-propoxyethane		10050	243-963-4
06.087	10	6290-17-1	Ethyl 2,4-dimethyl-1,3-dioxolane-2-acetate			228-536-2
06.088	01	4359-46-0	2-Ethyl-4-methyl-1,3-dioxolane			224-435-2
06.089	01	6454-22-4	2-Hexyl-4,5-dimethyl-1,3-dioxolane			229-261-0
06.090	09	3674-21-3	4-Hydroxymethyl-2-methyl-1,3-dioxolane			
06.091	01	6986-51-2	1-Isobutoxy-1-ethoxyethane		10054	230-251-3
06.092	01	75048-15-6	1-Isobutoxy-1-isopentyloxyethane		10059	278-063-0
06.093	02	67879-60-1	2-Isopropyl-4-methyl-1,3-dioxolane			267-550-3
06.094	01	1599-49-1	4-Methyl-2-pentyl-1,3-dioxolane	3630		247-807-6
06.095	01	4352-99-2	4-Methyl-2-propyl-1,3-dioxolane			224-420-0
06.096	01	122-51-0	Triethoxymethane		10903	204-550-4
06.097	09	7789-92-6	1,1,3-Triethoxypropane		10075	232-193-4
06.098	05	1193-11-9	2,2,4-Trimethyl-1,3-dioxolane	3441	11423	214-766-0
06.099	23	4359-31-3	Vanillin butylene glycol acetal			
06.100	01	13002-08-9	Acetaldehyde dipentyl acetal		10032	235-838-8
06.102	09	1708-36-7	2-Hexyl-5-hydroxy-1,3-dioxane		2016	216-961-6
06.104	23	68527-74-2	Vanillin propylene glycol acetal	3905		
06.105	02	13285-51-3	3-Methyl-1,1-di-isopentyloxybutane		10070	
06.106	02	13112-63-5	2-Methyl-1,1-di-isopentyloxypropane		10071	
06.107	01	13548-84-0	1-(2-Methylbutoxy)-1-isopentyloxyethane		10068	
06.108	23		Anisaldehyde butane-2,3-diol acetal			
06.109	04		1,1-Diethoxy-3,7-dimethyloct-6-ene			

FL No	Synonyms	Systematic name	Comments
06.064	Formaldehyde diethyl acetal		
06.065	Nonanal diethyl acetal		
06.066	Octanal diethyl acetal		
06.067	Valeraldehyde diethyl acetal; Pentanal diethyl acetal		
06.068	2- Propenal diethyl acetal		
06.069	Propanal diethyl acetal		
06.070	Undecanal diethyl acetal		
06.071	Acetaldehyde dihexyl acetal		
06.072	trans-2-Hexenal dimethyl acetal		
06.073	Hexanal dimethyl acetal		
06.074	Formaldehyde dimethyl acetal; Methylal		
06.075	Pentanal dimethyl acetal		
06.076	Propanal dimethyl acetal		
06.077			
06.078	Acetaldehyde diphenethyl acetal		
06.079	Acetaldehyde ethyl 2-methylbutyl acetal		
06.080	Acetaldehyde ethyl 2-phenylethyl acetal		
06.081	Ethyl cis-3-hexenyl acetal; Acetaldehyde ethyl 3-hexenyl acetal		5
06.082	Acetaldehyde ethyl hexyl acetal; 1-(1-Ethoxyethoxy) hexane		
06.083	Acetaldehyde ethyl 3-methylbutyl acetal	1-Ethoxy-1-(3-methylbutoxy)ethane	
06.084	Acetaldehyde ethyl methyl acetal		
06.085	Acetaldehyde ethyl amyl acetal; Acetaldehyde ethyl pentyl acetal		
06.086	Acetaldehyde ethyl propyl acetal		
06.087	Ethyl acetoacetate propyleneglycol ketal		
06.088			
06.089			
06.090			
06.091	Acetaldehyde ethyl isobutyl acetal	1-Ethoxy-1-(2-methylpropoxy)ethane	
06.092	Acetaldehyde isobutyl isoamyl acetal; Acetaldehyde isobutyl 3-methylbutyl acetal	1-(3-Methylbutoxy)-1-(2-methylpropoxy)ethane	
06.093			
06.094			
06.095			
06.096	Triethyl orthoformate; Ethyl orthoformate		
06.097	3-Ethoxypropanal diethyl acetal		
06.098			
06.099	4-Hydroxy-3-methoxybenzaldehyde 2,3-butanediyl acetal	4-Ethyl-2-(4-hydroxy-3-methoxyphenyl)-1,3-dioxolane	
06.100			
06.102			
06.104	4-methyl-2-(4-hydroxy-3-methoxyphenyl)-1,3-dioxolane		
06.105	Isovaleraldehyde di-isoamyl acetal; 3-Methylbutanal di(3-methylbutyl) acetal	3-Methyl-1,1-di(3-methylbutoxy)butane	
06.106		2-Methyl-1,1-di(3-methylbutoxy)propane	
06.107	Methylbutyl acetal	1-(2-Methylbutoxy)-1-(3-methylbutoxy)ethane	
06.108		4,5-Dimethyl-2-(4-methoxyphenyl)-1,3-dioxolane	
06.109	Citronellal diethyl acetal; 3,7-Dimethyl-6-octenal diethyl acetal		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
06.110	01		1-Ethoxy-1-isopentyloxyhexane			
06.111	01		1-Ethoxy-1-methoxypropane			
06.112	01		1-Ethoxy-1-propoxyhexane			
06.113	23		Heliotropine butane-2,3-diol acetal			
06.114	01		1-Hexyloxy-1-isopentyloxyethane			
06.115	01		1-Isopentyloxy-1-pentyloxyethane			
06.120	08		DL-Menthone-1,2-glycerol ketal	3808		
06.123	01		1-Butoxy-1-isopentyloxyethane		10004	
06.124	02		1,1-Di-isobutoxy-3-methylbutane		10024	
06.125	01		1,1-Di-isobutoxypropane		10027	
06.127	01		1-Ethoxy-1-isopentyloxypropane		10036	
06.128	01		1-Ethoxy-1-pentyloxybutane		10045	
06.129	02		1-Ethoxy-2-methyl-1-isopentyloxypropane		10043	
06.130	02		1-Ethoxy-2-methyl-1-propoxypropane		10044	
06.131	02		1-Ethoxy-3-methyl-1-isopentyloxybutane		10042	
07.001	09	78-98-8	2-Oxopropanal	2969	105	201-164-8
07.002	05	110-43-0	Heptan-2-one	2544	136	203-767-1
07.003	05	106-35-4	Heptan-3-one	2545	137	203-388-1
07.004	21	98-86-2	Acetophenone	2009	138	202-708-7
07.005	21	122-48-5	Vanillyl acetone	3124	139	204-548-3
07.006	08	76-22-2	d-Camphor	2230	140	200-945-0
07.007	08	127-41-3	alpha-Ionone	2594	141	204-841-6
07.008	08	14901-07-6	beta-Ionone	2595	142	238-969-9
07.009	08	7779-30-8	Methyl-alpha-ionone	2711	143	204-842-1
07.010	08	127-43-5	Methyl-beta-ionone	2712	144	204-843-7
07.011	08	79-69-6	4-(2,5,6,6-Tetramethyl-2-cyclohexenyl)-3-buten-2-one	2597	145	201-219-6
07.012	08	99-49-0	Carvone	2249	146	202-759-5
07.013	21	93-08-3	Methyl 2-naphthyl ketone	2723	147	202-216-2
07.014	12	118-71-8	Maltol	2656	148	204-271-8
07.015	05	110-93-0	6-Methylhept-5-en-2-one	2707	149	203-816-7
07.016	05	112-12-9	Undecan-2-one	3093	150	203-937-5
07.017	05	108-10-1	4-Methylpentan-2-one	2731	151	203-550-1
07.018	10	3848-24-6	Hexan-2,3-dione	2558	152	223-350-8

FL No	Synonyms	Systematic name	Comments
06.110	Hexanal ethyl 3-methylbutyl acetal	1-Ethoxy-1-(3-methylbutoxy)hexane	
06.111	Propanal ethyl methyl acetal		
06.112	Hexanal ethyl propyl acetal		
06.113	Piperonal butane-2,3-diol acetal	4,5-Dimethyl-2-(3,4-methylenedioxyphenyl)-1,3-dioxolane	
06.114	Acetaldehyde hexyl isoamyl acetal; Acetaldehyde hexyl 3-methylbutyl acetal	1-Hexoxy-1-(3-methylbutoxy)ethane	
06.115	Acetaldehyde 3-methylbutyl pentyl acetal	1-(3-Methylbutoxy)-1-pentyloxyethane	
06.120			
06.123	Acetaldehyde butyl isoamyl acetal	1-Butoxy-1-(3-methylbutoxy)ethane	
06.124	Isovaleraldehyde di-isobutyl acetal; 3-Methylbutanal di-sobutyl acetal	1,1-Di(2-methylpropoxy)-3-methylbutane	
06.125	Propanal di-isobutyl acetal	1,1-Di(2-methylpropoxy)propane	
06.127	Butanal ethyl isoamyl acetal; Butanal ethyl 3-methylbutyl acetal	1-Ethoxy-1-(3-methylbutoxy)propane	
06.128	Butanal ethyl amyl acetal; 2,3- Butylene glycol; Dimethyl ethylene glycol		
06.129	Isobutanal ethyl isoamyl acetal; 2-Methylpropanal ethyl 3-methylbutyl acetal	1-Ethoxy-2-methyl-1-(3-methylbutoxy)butane	
06.130	Isobutanal ethyl propyl acetal; 2-Methylpropanal ethyl propyl acetal		
06.131	Isovaleraldehyde ethyl isoamyl acetal; 3-Methylbutanal ethyl 3-methylbutyl acetal	1-Ethoxy-3-methyl-1-(3-methylbutoxy)butane	
07.001	Pyruvaldehyde; 2-Ketopropionaldehyde; Acetylformaldehyde; Methyl glyoxal; Pyruvic aldehyde; Propan-2-on-1-al		
07.002	Ketone C-7; Methyl amyl ketone; Amyl methyl ketone		
07.003	Ethyl butyl ketone; Butyl ethyl ketone;		
07.004	Methyl phenyl ketone; Acetylbenzene; Acetylbenzol; Benzoylmethide; Phenyl methyl ketone		
07.005	Zingerone; 3-Methoxy-4-hydroxy-benzylacetone; 2-Ethyl methyl ketone; 3-Methoxy-4-methoxybenzylacetone; Vanillylacetone;	4-(4-Hydroxy-3-methoxyphenyl)butan-2-one	
07.006	2-Camphanone; 2-Bornanone; 2-Keto-1,7,7-trimethylnorcamphane; 1,7,7-trimethylbicyclo-[2.2.1]-2-heptanone	dl-Bornan-2-one	5
07.007		4-(2,6,6-Trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	
07.008	beta-Irisone; 4-(2,6,6-Trimethyl-1-cyclohexen-1-yl)-3-buten-2-one; beta-Cyclocitrylideneacetone	4-(2,6,6-Trimethylcyclohex-1-enyl)but-3-en-2-one	5
07.009	alpha-Cetone; 5-(2,6,6-Trimethyl-2-cyclohexen-1-yl)-4-penten-3-one; Raldeine; alpha, Cyclocitrylideneethyl ethyl ketone	1-(2,6,6-Trimethylcyclohex-2-enyl)pent-1-en-3-one	
07.010	5-(2,6,6-Trimethyl-1-cyclohexen-1-yl)-4-penten-3-one; Raldeine; beta-Cyclocitrylidenebutanone, beta-Methylionone; beta-Iraldeine	1-(2,6,6-Trimethylcyclohex-1-enyl)pent-1-en-3-one	
07.011	alpha-Irone; 6-Methylionone; 4(2,5,6,6-Tetramethyl-2-cyclohexen-1-yl)-3-buten-2-one;		
07.012	Carvol; 1-Methyl-4-isopropenyl-6-cyclohexen-2-one	p-Mentha-1,8-dien-2-one	
07.013	2-Acetonaphthone; 2-acetylnaphthalene; oranger crystals; beta-methyl naphthyl ketone; beta-Acetonaphthone;		
07.014	Veltol (Pfizer); Corps praline; 4H-Pyran-4-one, 3-hydroxy-2-methyl; 3-Hydroxy-2-methyl-(1,4-pyran); 2-Methyl pyromeconic acid	3-Hydroxy-2-methyl-4-pyrone	
07.015	Methyl heptenone; 2-Methyl-2-hepten-6-one; 2-Methylheptenone; Methyl hexenyl ketone		
07.016	Methyl nonyl ketone; 2-hendecanone; Undecanone-2; Methyl nonyl ketone; 2-Hendecanone; 2-Oxoundecane; Nonyl methyl ketone		
07.017	Methyl isobutyl ketone; Isobutyl methyl ketone; Isopropylacetone; Isohexanone; Hexone;		
07.018	Methyl propyl diketone; Acetyl butyryl; Acetyl-n-butyryl;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
07.019	05	111-13-7	Octan-2-one	2802	153	203-837-1
07.020	05	821-55-6	Nonan-2-one	2785	154	212-480-0
07.021	10	7493-59-6	Undeca-2,3-dione	3090	155	231-330-5
07.022	21	122-00-9	4-Methylacetophenone	2677	156	204-514-8
07.023	21	89-74-7	2,4-Dimethylacetophenone	2387	157	201-935-9
07.024	21	122-57-6	4-Phenylbut-3-en-2-one	2881	158	204-555-1
07.025	21	5349-62-2	4-Methyl-1-phenylpentan-2-one	2740	159	226-316-0
07.026	21	7774-79-0	4-(p-Tolyl)butan-2-one	3074	160	
07.027	21	1901-26-4	3-Methyl-4-phenylbut-3-en-2-one	2734	161	217-599-1
07.028	21	119-53-9	Benzoin	2132	162	204-331-3
07.029	21	104-20-1	4-(4-Methoxyphenyl)butan-2-one	2672	163	203-184-2
07.030	21	104-27-8	1-(4-Methoxyphenyl)pent-1-en-3-one	2673	164	203-190-5
07.031	21	55418-52-5	Piperonyl acetone	2701	165	259-630-1
07.032	21	119-61-9	Benzophenone	2134	166	204-337-6
07.033	08	95-41-0	Isojasmone	3552	167	202-417-5
07.034	08	17373-89-6	2-Hexylidenecyclopentan-1-one	2573	167	241-411-7
07.035	08	17369-60-7	Tetramethyl ethylcyclohexanone (mixture of isomers)	3061	168	241-403-3
07.036	08	127-51-5	alpha-Isomethyl ionone	2714	169	204-846-3
07.037	08	1195-79-5	Fenchone	2479	551	225-160-0
07.038	21	100-06-1	4-Methoxyacetophenone	2005	570	202-815-9
07.039	09	7786-52-9	Octan-3-on-1-ol	2804	592	
07.040	21	93-55-0	1-Phenylpropan-1-one	3469	599	202-257-6
07.041	08	79-89-0	beta-Isomethylionone		650	201-231-1
07.042	21	645-13-6	4-Isopropylacetophenone	2927	651	211-433-1
07.044	05	625-33-2	Pent-3-en-2-one	3417	666	210-888-3
07.045	08	2408-37-9	2,2,6-Trimethylcyclohexanone	3473	686	219-309-9
07.046	21	1080-12-2	Vanillylidene acetone	3738	691	214-096-9
07.047	12	4940-11-8	Ethyl maltol	3487	692	225-582-5
07.048	05	2497-21-4	4-Hexen-3-one	3352	718	219-681-2
07.049	21	103-13-9	1-(4-Methoxyphenyl)-4-methylpent-1-en-3-one	3760	719	
07.050	05	67-64-1	Acetone	3326	737	200-662-2
07.051	10	513-86-0	3-Hydroxybutan-2-one	2008	749	208-174-1
07.052	10	431-03-8	Diacetyl	2370	752	207-069-8
07.053	05	78-93-3	Butan-2-one	2170	753	201-159-0
07.054	05	107-87-9	Pentan-2-one	2842	754	203-528-1

FL No	Synonyms	Systematic name	Comments
07.019	Methyl hexyl ketone; n-Hexyl methyl ketone; Hexyl methyl ketone; Octan-2-one		
07.020	Methyl heptyl ketone;		
07.021	Acetyl nonanyl; Acetyl nonanoyl; Acetyl pelargonyl;		
07.022	p-Methylacetophenone; Methyl p-tolyl ketone; 1-Acetyl-4-methylbenzene; 1-methyl-4-acetyl benzene;		
07.023	Acetyl-m-Xylene; methyl 2,4-Dimethylphenyl ketone		
07.024	Benzylidene acetone; Cinnamyl methyl ketone; Methyl styryl ketone; Acetocinnamone; Benzalacetone;		
07.025	Benzyl isobutyl ketone; Isobutyl benzyl ketone;		
07.026		4-(4-Methylphenyl)butan-2-one	
07.027	Benzylidene methyl acetone; 1-Methyl-1-benzylideneacetone; 3-Benzylidene-2-butanone; alpha-Methyl-alpha-Benzalacetone;		
07.028	Benzoyl phenyl carbinol; alpha-Hydroxy-alpha-phenylacetophenone; 2-Hydroxy-1,2-diphenylethane	2-Hydroxy-2-phenylacetophenone	
07.029	Anisyl acetone; p-methoxyphenylbutanone; 2-Butanone, 4-(4-methoxyphenyl)-; Raspberry ketone; methyl oxanone; p-Methoxybenzylacetone		
07.030	Ethone; alpha-Methylanisalacetone; Alpha-Methyl anisylidene acetone; p-Methoxystyryl ethyl ketone		
07.031	2-Butanone, 4-(1,3-benzodioxol-5-yl); Dulcinyll; Heliotropyl acetone	4-(3,4-Methylenedioxyphenyl)butan-2-one	
07.032	Benzoylbenzene; Diphenyl ketone; Diphenylmethanone; Alpha-Oxodiphenylmethane		
07.033		2-Hexyl-cyclopent-2-en-1-one and 2-Hexylidene cyclopentanone	5
07.034	alpha-Hexylidenecyclopentanone		5
07.035			5
07.036	4-(2,6,6-Trimethyl-2-cyclohexen-1-yl)-3-methyl-3-buten-2-one; Methyl-gamma-Ionone; Isomethylionone; gamma-Methylionone	4-(2,6,6-Trimethylcyclohex-2-enyl)-3-methylpent-3-en-2-one	
07.037	d-1,3,3-Trimethyl-2-norbornanone; d-1,3,3-Trimehyl-2-norcamphanone,		5
07.038	Acetanisole; p-Acetylanisole; 4-Acetylanisole;		
07.039	3-Oxo-1-octanol; Caproylethanoate; Hexanoylethanoate; Methylol methyl amyl ketone; 1-hydroxyoctan-3-on;		
07.040	Propiophenone; Phenyl ethyl ketone; Propionylbenzene		
07.041	Isomethyl beta-ionone	3-Methyl-4-(2,6,6-trimethylcyclohex-1-enyl)but-3-en-2-one	
07.042	Methyl p-isopropylphenyl ketone; p-Acetylcumene; p-Propylacetophenone;		
07.044			
07.045			
07.046	Methyl-3-methoxy-4-hydroxystyryl ketone; Dihydrozingerone;	4-(4-Hydroxy-3-methoxyphenyl)but-3-en-2-one	
07.047	Vetol-Plus; 2-Ethylpyromeconic acid; 3-Hydroxy-2-ethyl-4-pyrone; 2-Ethyl-3-ol-4H-pyran-4-one;	2-Ethyl-3-hydroxy-4-pyrone	
07.048	2-Hexen-4-one; Hex-2-en-4-one; Propylene ethyl ketone		
07.049	Methoxystyryl isopropyl ketone; Isopropyl 4-methyloxystyryl ketone		
07.050	Propan-2-one; Dimethyl ketone; 2-Oxopropane; β-Ketopropane; Pyroacetic ether		1
07.051	Acetoin; AMC; Acetyl methyl carbinol; 2,3-Butanolone; Dimethylketol; 3-Hydroxy-2-butanone; Gamma-hydroxy-beta-oxobutane		
07.052	Dimethyl diketone; Biacetyl; 2,3-diketobutane; 2,3-Butanedione; Dimethylglyoxal;	Butane-2,3-dione	
07.053	Ethyl methyl ketone; Methyl ethyl ketone; Ketone C-4		
07.054	Ethyl acetone; Methyl propyl ketone; Propyl methyl ketone; Pentane-2-one		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
07.097	10	59191-78-5	3-(Hydroxymethyl)octan-2-one	3292	11113	261-652-1
07.098	08	1193-18-6	3-Methylcyclohex-2-en-1-one	3360	11134	214-769-7
07.099	05	1604-28-0	6-Methylhepta-3,5-dien-2-one	3363	11143	216-507-7
07.100	05	3240-09-3	5-Methylhex-5-en-2-one	3365	11150	221-807-6
07.101	05	141-79-7	4-Methylpent-3-en-2-one	3368	11853	205-502-5
07.102	05	1629-58-9	Pent-1-en-3-one	3382	11179	216-624-3
07.103	05	593-08-8	Tridecan-2-one	3388	11194	209-784-0
07.104	05	4643-25-8	Hept-2-en-4-one	3399	11093	225-070-1
07.105	05	1119-44-4	Hept-3-en-2-one	3400	11094	214-278-8
07.106	05	5166-53-0	5-Methylhex-3-en-2-one	3409	11149	225-950-5
07.107	05	1669-44-9	Oct-3-en-2-one	3416	11170	216-793-3
07.108	08	23696-85-7	beta-Damascenone	3420	11197	245-833-2
07.109	30	1125-21-9	2,6,6-Trimethylcyclohex-2-en-1,4-dione	3421	11200	214-406-2
07.110	08	542-46-1	Cycloheptadec-9-en-1-one	3425	11744	208-813-4
07.111	08	541-91-3	3-Methylcyclopentadecan-1-one	3434	11135	208-795-8
07.112	08	2758-18-1	3-Methyl-2-cyclopenten-1-one	3435	11137	220-421-5
07.113	05	925-78-0	Nonan-3-one	3440	11160	213-125-2
07.114	05	762-29-8	6,10,14-Trimethylpentadeca-5,9,13-trien-2-one	3442	11206	212-097-9
07.115	08	20483-36-7	3,4-Dehydrodihydro-beta-ionone	3447	11057	243-847-3
07.116	08	43219-68-7	1-(1,4-Dimethylcyclohex-3-en-1-yl)ethan-1-one	3449	11062	256-150-4
07.117	30	42348-12-9	3-Ethyl-2-hydroxy-4-methylcyclopent-2-en-1-one	3453	11077	255-767-6
07.118	30	53263-58-4	5-Ethyl-2-hydroxy-3-methylcyclopent-2-en-1-one	3454	11078	258-451-6
07.119	30	10316-66-2	2-Hydroxycyclohex-2-en-1-one	3458	11046	
07.120	30	4883-60-7	2-Hydroxy-3,5,5-trimethylcyclohex-2-en-1-one	3459	11198	
07.121	05	10519-33-2	Dec-3-en-2-one	3532	11751	234-059-0
07.122	05	108-83-8	2,6-Dimethylheptan-4-one	3537	11914	203-620-1
07.123	05	3796-70-1	Geranylacetone	3542	11088	223-269-8
07.124	21	118-93-4	2-Hydroxyacetophenone	3548	11784	204-288-0
07.125	10	3142-66-3	3-Hydroxypentan-2-one	3550	11115	
07.126	08	78-59-1	3,5,5-Trimethylcyclohex-2-en-1-one	3553	11918	201-126-0
07.127	08	491-09-8	p-Mentha-1,4(8)-dien-3-one	3560	11189	207-729-5
07.128	08	7764-50-3	Dihydrocarvone	3565	11703	231-857-0
07.129	08	3720-16-9	3-Methyl-5-propylcyclohex-2-en-1-one	3577		223-069-0
07.130	08	57378-68-4	delta-Damascone	3622		260-709-8
07.131	08	17283-81-7	Dihydro-beta-ionone	3626	11060	241-318-1
07.132	08	31499-72-6	Dihydro-alpha-ionone	3628	11059	250-657-4
07.133	21	13171-00-1	4-Acetyl-6- <i>t</i> -butyl-1,1-dimethylindane	3653		236-114-4
07.134	08	43052-87-5	alpha-Damascone	3659	11053	
07.135	25	28631-86-9	2,4-Dihydroxyacetophenone	3662	11884	
07.136	08	34545-88-5	4,4a,5,6-Tetrahydro-7-methylnaphthalen-2(3H)-one	3715		252-079-8

FL No	Synonyms	Systematic name	Comments
07.097			
07.098	1- Methyl-1-cyclohexenone-3		
07.099	2-Methyl-hepta-2,4-dien-6-one; Methylheptadienone,		
07.100	2-Methylallylacetone; 2-Methyl-1-hexen-5-one; 2-Methyl-allyl-acetone		
07.101	Mesityl oxide; Methyl isobutenyl ketone; Isopropylideneacetone;		
07.102	Ethyl vinyl ketone		
07.103	Methyl undecyl ketone; Hendecyl methyl ketone		
07.104			
07.105	Methyl pentenyl ketone; Butylidene acetone; <i>n</i> -Butylideneacetone		
07.106	Isobutylidene acetone		
07.107			
07.108	4-(2,6,6-trimethylcyclohexa-1,3-dienyl)-but-2-en-4-one	1-(2,6,6-Trimethylcyclohexa-1,3-dienyl)but-2-en-1-one	
07.109	3,5,5-Trimethylcyclohex-2-ene-1,4-dione; 2-Cyclohexenedione-1,4,3,5,5-trimethyl-;		
07.110	Civetone; Civetone		5
07.111	Muscone; Methylxaltone		
07.112	1-Methyl-1-cyclopenten-3-one		
07.113	Ethyl hexyl ketone		
07.114	Farnesyl acetone; 2,6,10-Trimethyl-2,6,10-pentadecatrien-14-one; 6,10,14-Trimethyl-5,9,13-pentadecatrien-2-one		
07.115	Dehydrodihydroionone; 4-(2,6,6-trimethylcyclohexadien-1-yl)-2-butanone	4-(2,6,6-Trimethyl-1,3-cyclohexadienyl)butan-2-one	
07.116	4-Acetyl-1,4-dimethylcyclohex-1-ene		
07.117	3-Ethyl-4-methylcyclopentene; Ethylcyclopentenolone; 3-Ethyl-2-cyclopenten-2-ol-1-one;		
07.118	5-Ethyl-3-methylcyclopentene;		
07.119	Cyclohexane-1,2-dione		
07.120	3,5,5-Trimethylcyclohexane-1,2-dione; 3,5,5-Trimethyl-1,2-cyclohexanedione;		
07.121	Heptylidene acetone; Oenanthylidene acetone; Enanthylidene acetone		
07.122	Di-sobutyl ketone; Isobutyl ketone; iso-Nonanone; Isovalerone		
07.123	alpha, beta-dihydropseudoionone	6,10-Dimethyl-5(trans),9-undecadien-2-one	
07.124	Ethanone, 1-(2-hydroxyphenyl)-; <i>o</i> -acetylphenol		
07.125	Acetyl ethyl barbonol;		
07.126	Isophorone; Isoacetophenone		
07.127	Piperitenone; 4-Isopropylidene-1-methyl-1-cyclohexen-3-one;		
07.128	Cis-Dihydrocarvone; cis-Menthen-8(9)-one(2); 1-Methyl-4-isopropenylcyclohexan-2-one;	<i>p</i> -Menth-8(10)-en-2-one	
07.129	1-Methyl-5- <i>n</i> -propyl-1-cyclohexen-3-one		
07.130		1-(2,6,6-Trimethylcyclohex-3-enyl)but-2-en-1-one	5
07.131	4-(2,6,6-Trimethyl-2-cyclohexenyl)butan-2-one	4-(2,6,6-Trimethylcyclohex-1-enyl)butan-2-one	
07.132		4-(2,6,6-Trimethylcyclohex-2-enyl)butan-2-one	
07.133	Celestolide; 4-Acetyl-1,1-dimethyl-6- <i>tert</i> -butylindane	Acetyl-6- <i>tert</i> -butyl-2,3-dihydro-1,1-dimethylindane	
07.134	4-(2,6,6-Trimethyl-2-cyclohexenyl)-2-butene-4-one	1-(2,6,6-Trimethylcyclohex-2-enyl)but-2-en-1-one	5
07.135	1-Ethanone;		
07.136			

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
07.137	05	2345-28-0	Pentadecan-2-one	3724	11808	219-064-8
07.138	05	63759-55-7	2-Pentylbut-1-en-3-one	3725		264-448-0
07.139	05	81925-81-7	5-Methylhept-2-en-4-one	3761		
07.140	08	1128-08-1	3-Methyl-2-pentylcyclopent-2-en-1-one	3763		214-434-5
07.142	25	498-02-2	Acetovanillone		11035	207-854-5
07.143	08	32388-55-9	Acetylcedrene			251-020-3
07.144	30	1670-46-8	2-Acetylcyclopentan-1-one			216-797-5
07.145	05	78-94-4	But-3-en-2-one		11043	201-160-6
07.146	08	2244-16-8	d-Carvone	2249	146	218-827-2
07.147	08	6485-40-1	l-Carvone	2249	146	229-352-5
07.148	08	108-94-1	Cyclohexanone	3909	11047	203-631-1
07.149	08	120-92-3	Cyclopentanone	3910	11050	204-435-9
07.150	05	693-54-9	Decan-2-one		11055	211-752-6
07.151	05	928-80-3	Decan-3-one		11056	213-183-9
07.152	10	51933-13-2	3,3-Diethoxybutan-2-one			
07.153	08	1803-39-0	1,10-Dihydronootkatone	3776		
07.154	25	5650-43-1	1-(3,5-Dimethoxy-4-hydroxyphenyl)propan-1-one		11106	
07.155	08	30434-64-1	3,4-Dimethylcyclopent-2-en-1-one			250-199-5
07.156	05	2550-18-7	2,6-Dimethyloct-6-en-3-one			
07.157	05	1604-34-8	6,10-Dimethylundecan-2-one		11068	216-509-8
07.158	05	6175-49-1	Dodecan-2-one		11069	228-222-5
07.159	08	4695-62-9	d-Fenchone	2479	551	225-160-0
07.160	05	2922-51-2	Heptadecan-2-one		11089	
07.161	05	1629-60-3	Hex-1-en-3-one			216-625-9
07.162	05	109-49-9	Hex-5-en-2-one			203-675-1
07.163	05	591-78-6	Hexan-2-one		11776	209-731-1
07.164	21	2478-38-8	4-Hydroxy-3,5-dimethoxyacetophenone		11105	219-610-5
07.165	10	123-42-2	4-Hydroxy-4-methylpentan-2-one			204-626-7
07.166	10	590-90-9	4-Hydroxybutan-2-one		11103	209-693-6
07.167	10	4984-85-4	4-Hydroxyhexan-3-one		11108	225-637-3
07.168	30	490-03-9	2-Hydroxypiperitone			207-704-9
07.169	09	116-09-6	1-Hydroxypropan-2-one		11101	204-124-8
07.170	32	23267-57-4	beta-Ionone epoxide		11202	245-542-0
07.171	08	18358-53-7	Isopinocampone		11125	242-228-5
07.172	08	500-02-7	4-Isopropylcyclohex-2-en-1-one	3939	11127	207-898-5
07.173	08	13215-88-8	Megastigma-4,6,8-trien-3-one			236-187-2
07.174	08	67401-27-8	Megastigma-5,8-dien-4-one			266-685-5
07.175	08	89-81-6	p-Menth-1-en-3-one	2910	2052	201-942-7
07.176	08	89-80-5	trans-Menthone	2667	2035	201-941-1
07.177	05	33046-81-0	7-Methyl-3-octenone-2	3868		251-361-8
07.178	05	563-80-4	3-Methylbutan-2-one		11131	209-264-3
07.179	08	583-60-8	2-Methylcyclohexanone	3946		209-513-6
07.180	08	591-24-2	3-Methylcyclohexanone	3947		209-710-7

FL No	Synonyms	Systematic name	Comments
07.137	Methyl tridecyl ketone		
07.138	3-Methylene-2-octanone	3-Methyleneoctan-2-one	
07.139	2-Hepten-4-one, 5-methyl,		
07.140	Dihydrojasmane; 2-Pentyl-3-methyl-2-cyclopenten-1-one; 3-Methyl-2-(n-pentanyl)-2-cyclopentene-1-one		
07.142		4-Hydroxy-3-methoxyacetophenone	
07.143	Methyl cedrenyl ketone; 1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	5-Acetyl-2,2,4,8-tetramethyltricyclo[5,3,1(3,7),0(1,7)]undec-4(5)-ene	
07.144			
07.145	Methyl vinyl ketone		
07.146		d-p-Mentha-1,8-dien-2-one	5
07.147		l-p-Mentha-1,8-dien-2-one	5
07.148	Cyclohexyl ketone; Hexanon; Ketoexamethylene;		
07.149	Ketocyclopentane; Ketopentamethylene		
07.150			
07.151			
07.152			
07.153		1,2,6-Trimethyl-9-isopropylene-bicyclo[4.4.0]decan-4-one	
07.154	Propiosyringone; 3,5-Dimethoxy-4-hydroxypropiofenone		
07.155			
07.156			
07.157			
07.158			
07.159	d-1,3,3-Trimethyl-2-norbornanone	1,3,3-Trimethyl-bicyclo[2.2.1]heptan-2-one	5
07.160	methyl-pentadecyl-ketone-;		
07.161			
07.162			
07.163			
07.164	Acetosyringone		
07.165			
07.166			
07.167			
07.168		2-Hydroxy-menth-1-en-3-one	
07.169	Hydroxyacetone; Acetyl carbinol		
07.170		4-(1,2-Epoxy-2,6,6-trimethylcyclohexyl)but-3-en-2-one	
07.171		2,6,6-Trimethyl-bicyclo[3.1.1]cycloheptan-3-one	
07.172	Cryptone; Crypton; 4-Isopropylcyclohex-2-enone; DL-Kryptone		
07.173		4-(2-Butenylidene)-3,5,5-trimethylcyclohex-2-ene-1-one	
07.174		3-(2-Butenyl)-2,4,4-trimethylcyclohex-2-ene-1-one	
07.175	Piperitone; alpha-Piperitone; 1-Methyl-4-isopropyl-1-cyclohexen-3-one		
07.176		trans-p-Menthan-3-one	5
07.177	trans-7-Methyl-3-octen-2-one		5
07.178	3-Methyl-1-butenol-2; Methyl isopropyl ketone		
07.179	Methyl anone		
07.180			

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
07.181	05	928-68-7	6-Methylheptan-2-one		11146	213-179-7
07.182	05	541-85-5	5-Methylheptan-3-one			208-793-7
07.184	10	113486-29-6	3-Methylnona-2,4-dione			
07.185	05	565-61-7	3-Methylpentan-2-one		11157	209-282-1
07.186	10	815-57-6	3-Methylpentane-2,4-dione			212-420-3
07.187	05	32064-72-5	Non-2-en-4-one		11162	250-909-3
07.188	05	14309-57-0	Non-3-en-2-one	3955	11163	238-248-9
07.189	05	4485-09-0	Nonan-4-one		11161	224-770-4
07.190	05	65213-86-7	Octa-1,5-dien-3-one			
07.191	10	123-54-6	Pentan-2,4-dione		11036	204-634-0
07.192	30	93-91-4	1-Phenylbutan-1,3-dione		11181	202-286-4
07.193	21	495-40-9	1-Phenylbutan-1-one			207-799-7
07.194	21	2550-26-7	4-Phenylbutan-2-one		11182	219-847-4
07.195	21	103-79-7	1-Phenylpropan-2-one		11042	203-144-4
07.196	08	80-57-9	Pin-2-en-4-one		11186	201-292-4
07.197	08	31375-17-4	6-Propionyl-p-menth-1-ene			250-600-3
07.198	05	141-10-6	Pseudo-ionone		11191	205-457-1
07.199	05	2345-27-9	Tetradecan-2-one		11192	219-063-2
07.200	08	79-70-9	4-(2,5,6,6-Tetramethyl-1-cyclohexenyl)but-3-en-2-one			201-220-1
07.201	05	60437-21-0	Tridec-12-en-2-one			
07.202	08	20013-73-4	2,6,6-Trimethylcyclohex-2-en-1-one			243-465-7
07.203	08	873-94-9	3,3,5-Trimethylcyclohexan-1-one			212-855-9
07.204	05	546-49-6	3,3,6-Trimethylhepta-1,5-dien-4-one			208-903-3
07.205	05	502-69-2	6,10,14-Trimethylpentadecan-2-one		11205	207-950-7
07.206	21	56681-06-2	4-(2,3,6-Trimethylphenyl)but-3-en-2-one			
07.207	08	3603-99-4	Cyclotetradecanone			222-758-3
07.209	08	21368-68-3	Camphor	2230	140	207-355-2
07.210	05	24415-26-7	1-Nonene-3-one			
07.214	21	941-98-0	alpha-Methyl naphthyl ketone			213-384-1
07.215	08	464-49-3	(1R)-1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one	2230	140	207-335-2
07.216	05	689-67-8	6,10-Dimethyl-5,9-undecadien-2-one			211-711-2
07.218	08	1335-46-2	Methyl ionone			215-635-0
07.219	08	6261-18-3	trans-3-Methyl-2-(2-pentenyl)-2-cyclopenten-1-one	3196	11786	228-410-7
07.221	08	11050-62-7	2-Methyl-3-(2-pentenyl)-2-cyclopenten-1-one	3552		234-273-4
07.222	08	14073-97-3	(2S-trans)-5Methyl-2-(1-methylethyl)cyclohexanone	2667	2035	237-926-1
07.224	08	23726-91-2	tr-1-(2,6,6-Trimethyl-1-cyclohexen-1-yl)but-2-en-1-one	3243	2340	245-842-1
07.225	08	23726-94-5	cis-1-(2,6,6-Trimethyl-2-cyclohexen-1-yl)but-2-en-1-one	3659	11053	245-845-8
07.226	08	24720-09-0	tr-1-(2,6,6-Trimethyl-2-cyclohexen-1-yl)but-2-en-1-one			246-430-4
07.227	05	68228-05-7	6,10-Dimethylundecadien-2-one			269-400-2
07.231	08		alpha-Damascenone			
07.234	25		5-Paradol			
07.236	05	22610-86-2	5-Octen-2-one		11171	
07.238	10	37160-77-3	3-Hydroxy-2-octanone			
08.001	01	64-18-6	Formic acid	2487	1	200-579-1
08.002	01	64-19-7	Acetic acid	2006	2	200-580-7
08.003	01	79-09-4	Propionic acid	2924	3	201-176-3
08.004	09	598-82-3	Lactic acid	2611	4	209-954-4

FL No	Synonyms	Systematic name	Comments
07.181			
07.182			
07.184			
07.185			
07.186			
07.187			
07.188			
07.189			
07.190			
07.191	Acetylacetone		
07.192	Benzoylacetone		
07.193			
07.194			
07.195	Benzyl methyl ketone		
07.196	Verbenone	4,6,6-Trimethyl-bicyclo[3.1.1]hept-3-en-2-one	
07.197		1-(p-Menth-1-en-6-yl)propan-1-one	
07.198		6,10-Dimethylundeca-3,5,9-trien-2-one	
07.199			
07.200	beta-Irone		
07.201			
07.202			
07.203			
07.204			
07.205	Hexahydrofarnesyl acetone		
07.206			
07.207			
07.209			5
07.210			
07.214	Naphtyl methyl ketone, 1-acetonaphtone		
07.215	d-Camphor		5
07.216			
07.218			
07.219	trans-Jasmone		5
07.221			
07.222	l-Menthone		5
07.224			5
07.225	cis-alpha-Damascone		5
07.226			
07.227			
07.231		1-(2,6,6-Trimethylcyclohexa-2,4-dienyl)but-2-en-1-one	
07.234		1-(4-Hydroxy-3-methoxyphenyl)nonan-3-one	
07.236			
07.238			
08.001	Methanoic acid		1
08.002	Ethanoic acid; Ethylic acid; Methanecarboxylic acid		1
08.003	Methylacetic acid; Ethylformic acid		1
08.004	alpha-Hydroxypropanoic acid;	2-Hydroxypropanoic acid	1

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
08.005	01	107-92-6	Butyric acid	2221	5	203-532-3
08.006	02	79-31-2	2-Methylpropionic acid	2222	6	201-195-7
08.007	01	109-52-4	Valeric acid	3101	7	203-677-2
08.008	02	503-74-2	3-Methylbutyric acid	3102	8	207-975-3
08.009	01	142-62-1	Hexanoic acid	2559	9	205-550-7
08.010	01	124-07-2	Octanoic acid	2799	10	204-677-5
08.011	01	334-48-5	Decanoic acid	2364	11	206-376-4
08.012	01	143-07-7	Dodecanoic acid	2614	12	205-582-1
08.013	01	112-80-1	Oleic acid	2815	13	204-007-1
08.014	01	57-10-3	Hexadecanoic acid	2832	14	200-312-9
08.015	01	57-11-4	Octadecanoic acid	3035	15	200-313-4
08.016	01	544-63-8	Tetradecanoic acid	2764	16	208-875-2
08.017	30	6915-15-7	l-Malic acid	2655	17	230-022-8
08.018	30	133-37-9	Tartaric acid	3044	18	205-105-7
08.019	09	127-17-3	Pyruvic acid	2970	19	204-824-3
08.021	23	65-85-0	Benzoic acid	2131	21	200-618-2
08.022	22	621-82-9	Cinnamic acid	2288	22	210-708-3
08.023	09	123-76-2	4-Oxovaleric acid	2627	23	204-649-2
08.024	09	110-15-6	Succinic acid		24	203-740-4
08.025	09	110-17-8	Fumaric acid	2488	25	203-743-0
08.026	09	124-04-9	Adipic acid	2011	26	204-673-3
08.028	01	111-14-8	Heptanoic acid	3348	28	203-838-7
08.029	01	112-05-0	Nonanoic acid	2784	29	203-931-2
08.031	02	97-61-0	2-Methylvaleric acid	2754	31	202-594-9
08.032	22	501-52-0	3-Phenylpropionic acid	2889	32	207-924-5
08.033	30	499-12-7	Prop-1-ene-1,2,3-tricarboxylic acid	2010	33	207-877-0
08.034	07	5292-21-7	Cyclohexylacetic acid	2347	34	226-132-0
08.035	02	4536-23-6	2-Methylhexanoic acid	3191	582	224-883-9
08.036	04	502-47-6	Citronellic acid	3142	616	207-939-7
08.037	30	328-50-7	2-Oxoglutaric acid	3891	653	206-330-3
08.038	15	103-82-2	Phenylacetic acid	2878	672	203-148-6
08.039	04	112-38-9	Undec-10-enoic acid	3247	689	203-965-8
08.040	23	99-96-7	4-Hydroxybenzoic acid		693	202-804-9
08.041	04	60-33-3	Octadeca-9,12-dienoic acid	3380	694	200-470-9
08.042	01	112-37-8	Undecanoic acid	3245	696	203-964-2
08.043	23	121-34-6	Vanillic acid		697	204-466-8
08.044	03	21016-46-6	2,4-Dimethylpent-2-enoic acid	3143	744	
08.045	02	88-09-5	2-Ethylbutyric acid	2429	2001	201-796-4
08.046	02	116-53-0	2-Methylbutyric acid	2695	2002	204-145-2

FL No	Synonyms	Systematic name	Comments
08.005	Ethylacetic acid; Butanoic acid; 1-Propanecarboxylic acid		
08.006	Isobutyric acid; Isopropylformic acid; Butyric iso acid		
08.007	Pentanoic acid; Propylacetic acid; Valerianic acid; 1-Butanecarboxylic acid		
08.008	Isopentanoic acid; beta-Methylbutyric acid; Delphinic acid; Active valeric acid; β-Methylbutyric acid;		
08.009	Caproic acid; Hexoic acid; 2-Butylacetic acid; Pentylformic acid		1
08.010	Caprylic acid; Octoic acid; C-8; Octylic acid; 1-Heptanecarboxylic acid		1
08.011	Capric acid; Decylic acid; 1-Nonanecarboxylic acid		
08.012	Lauric acid; Dodecoic acid; Laurostearic acid		1
08.013	Oleic acid; trans-Elaidic acid	Octadec-9-enoic acid	1
08.014	Palmitic acid; Hexadecylic acid; Cetylic acid; 1-Pentadecanecarboxylic acid		1
08.015	Stearic acid; Octadecylic acid		
08.016	Myristic acid; Crocadic		1
08.017	2-Hydroxy-1,4-butanedioic acid; Hydroxysuccinic acid;	2-Hydroxybutane-1,4-dioic acid	1, 5
08.018	Racemic acid; 2,3-Dihydroxysuccinic acid	2,3-Dihydroxybutanedioic acid	1
08.019	2-Ketopropionic acid; Acetylformic acid; Alpha-Ketopropionoc acid; Pyroracemic acid	2-Oxopropanoic acid	
08.021	Benzenecarboxylic acid; Phenylformic acid; Dracylic acid; Carboxybenzene; Phenyl carboxylic acid;		1
08.022	tert-beta-Phenylacrylic acid; 3-Phenyl-2-propenoic acid; β-Phenylacrylic acid; 3-Phenylacrylic acid	3-Phenylprop-2-enoic acid	1
08.023	Laevulinic acid; Acetopropionic acid; Laevulic acid; Levulinic acid; 4-Oxopentanoic acid; 3-Acetylpropionic acid;		1
08.024	Butan-1,4-dioic acid; 1,2-Ethanedicarboxylic acid;	Butanedioic acid	1
08.025	Allomalenic acid; Boletic acid; tr-Butenedionic acid; tr-1,2-ethylenedicarboxylic acid	But-2(trans)-enedioic acid	1
08.026	1,4-Butanedicarboxylic acid;	Hexanedioic acid	1
08.028	n-Heptanoic acid; Enanthic; n-Heptylic; n-Heptoic acid; Oenanthic; Oenanthic acid; n-Heptanoic acid; Enanthic acid;		1
08.029	Pelargonic acid; Octane-1-carboxylic acid; Nonylic acid; Nonoic acid		
08.031	2-Methylpentanoic acid; Methylpropylacetic acid		
08.032	Benzylacetic acid; Hydrocinnamic acid; β-Phenylpropionic acid; Dihydrocinnamic acid		
08.033	Aconitic acid; Achilleic acid; Equisetic acid; Citridic acid; 2-Carboxyglutaconic acid		
08.034	Cyclohexaneacetic acid		
08.035	2-Methylcaproic acid; 2-Butylpropanoic acid; Hexana-2-carboxylic acid		
08.036	Rhodinolic acid; Rhodinic acid	3,7-Dimethyloct-6-enoic acid	
08.037	alpha-Ketoglutaric acid; 2-Oxo-1,5-pentanedioic acid; 2-Ketoglutaric acid	2-Oxopentanedioic acid	
08.038	alpha-Toluic acid; Benzylcarboxylic acid		
08.039	Undecylenic acid; 10-Hendecenoic acid		
08.040	p-Hydroxybenzoic acid		
08.041	Linoleic acid; Linoleic and Linolenic acids		1, 5
08.042	n-Undecoic acid; n-Undecylic acid; Hendecanoic acid		
08.043	4-Hydroxy-3-methoxy-benzoic acid	4-Hydroxy-3-methoxybenzoic acid	
08.044			
08.045	alpha-Ethylbutyric acid; Diethylacetic acid		
08.046	Methylethyl acetic acid; Butane-2-carboxylic acid		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
08.047	02	1188-02-9	2-Methylheptanoic acid	2706	2003	214-704-2
08.048	04	591-80-0	Pent-4-enoic acid	2843	2004	209-732-7
08.049	15	122-59-8	Phenoxyacetic acid	2872	2005	204-556-7
08.050	04	4219-24-3	Hex-3-enoic acid	3170	2256	224-157-1
08.051	09	759-05-7	3-Methyl-2-oxobutyric acid	3869	2262	212-065-4
08.052	09	816-66-0	4-Methyl-2-oxovaleric acid	3871	2263	212-435-5
08.053	09	141-82-2	Malonic acid		2264	205-503-0
08.054	03	13419-69-7	Hex-2(trans)-enoic acid	3169	11777	236-528-5
08.055	03	3142-72-1	2-Methyl-2-pentenoic acid	3195	11680	241-026-4
08.056	02	105-43-1	3-Methylvaleric acid	3437	10149	203-297-7
08.057	02	646-07-1	4-Methylvaleric acid	3463	10150	211-464-0
08.058	04	37674-63-8	2-Methylpent-3-enoic acid	3464	10147	253-610-6
08.059	04	1575-74-2	2-Methylpent-4-enoic acid	3511	10148	216-404-7
08.060	07	98-89-5	Cyclohexanecarboxylic acid	3531	11911	202-711-3
08.061	02	628-46-6	5-Methylhexanoic acid	3572	10142	
08.062	02	45019-28-1	4-Methylnonanoic acid	3574	11925	256-180-8
08.063	02	54947-74-9	4-Methyloctanoic acid	3575	11926	259-404-2
08.064	03	80-59-1	2-Methylcrotonic acid	3599	10168	201-295-0
08.065	04	14436-32-9	Dec-9-enoic acid	3660	10090	238-410-9
08.066	09	600-18-0	2-Oxobutyric acid	3723		209-986-9
08.067	07	71298-42-5	1,2,5,6-Tetrahydrocuminic acid	3731		
08.068	04	72881-27-7	Dec-(5- and 6)-enoic acid	3742		
08.070	03	541-47-9	3-Methylcrotonic acid	3187	10138	208-782-7
08.071	23	100-09-4	p-Anisic acid	3945	10077	202-818-5
08.072	03	3724-65-0	But-2-enoic acid (cis and trans)	3908	10080	223-077-4
08.073	03	3913-85-7	Dec-2-enoic acid	3913	10087	223-475-8
08.074	04	15469-77-9	Dec-3-enoic acid		10088	239-489-2
08.075	04	26303-90-2	Dec-4-enoic acid	3914	10089	247-599-7
08.076	23	89-86-1	2,4-Dihydroxybenzoic acid	3798		201-946-9
08.077	09	4324-38-3	3-Ethoxypropionic acid		10096	224-357-9
08.078	02	149-57-5	2-Ethylhexanoic acid			205-743-6
08.079	02	16493-80-4	4-Ethyl octanoic acid	3800		240-560-5
08.080	23	149-91-7	Gallic acid		10170	205-749-9
08.081	03	459-80-3	Geranic acid		10094	207-299-9
08.082	09	110-94-1	Glutaric acid			203-817-2
08.083	03	18999-28-5	Hept-2-enoic acid	3277	10102	242-738-8
08.084	04	29901-85-7	Hept-3-enoic acid		10103	249-943-1
08.085	03	110-44-1	Hexa-2,4-dienoic acid	3921		203-768-7
08.086	30	1113-60-6	3-Hydroxy-2-oxopropionic acid	3843		
08.087	23	530-57-4	4-Hydroxy-3,5-dimethoxybenzoic acid		10111	208-486-8
08.088	22	530-59-6	4-Hydroxy-3,5-dimethoxycinnamic acid			208-487-3
08.089	22	1135-24-6	4-Hydroxy-3-methoxycinnamic acid		10113	214-490-0

FL No	Synonyms	Systematic name	Comments
08.047	2-Methyloenanthalic acid; Methylamylacetic acid; Isocaprylic acid; Isooctanoic acid		
08.048	Allyl acetic acid		
08.049	Glycollic acid phenyl ether; Phenoxyethanoic acid; o-Phenylglycolic acid;		
08.050			
08.051	2-Oxoisovaleric acid; Dimethylpyruvic acid		
08.052	2-Keto-4-methyl-pentanoic acid; 4-Methyl-2-oxopentanoic acid; alpha-Ketoisocaproic acid; Isopropyl pyruvic acid		
08.053	Methanedicarboxylic acid; Propane dioic acid; Propan 1,3-dioic acid;	Propanedioic acid	1
08.054	β-Propylacrylic acid; 3-Propylacrylic acid		5
08.055	3-Ethyl-2-methylacrylic acid; 2-Pentene-2-carboxylic acid; 2-Propylidenepropionic acid		
08.056	Sec-butyl acetic acid; 2-Methyl-butane-1-carboxylic acid; β-Methylvaleric acid;		
08.057	Isohexanoic acid; Isocaproic acid; 4-Methyl pentanoic acid;		
08.058			
08.059			
08.060			
08.061	Isoheptanoic acid; Isovananthic acid; Isoamyl acetic acid		
08.062	4-Methylpelargonic acid		
08.063			
08.064	Tiglic acid; 2-Methyl crotonic acid; 2-Methyl-2-butenic acid; trans-2,3-Dimethyl-acrylic acid	Methylbut-2(trans)-enoic acid	5
08.065			
08.066	Ketobutyric acid; Alpha-Ketobutyric acid;		
08.067	4-Isopropyl-3-cyclohexene-1-carboxylic acid; 3-Cyclohexene-1-carboxylic acid, 4-(1-methylethyl)-, (±)-;	1-(4-Isopropylcyclohex-3-enyl) carboxylic acid	
08.068			
08.070	3,3-Dimethyl-acrylic acid; 3-Methyl-but-2-enoic acid; β,β-Dimethylacrylic acid; Senecioic acid	3-Methylbut-2(trans)-enoic acid	
08.071	4-Anisic acid; Draconic acid; p-Methoxybenzoic acid	4-Methoxybenzoic acid	
08.072	Crotonic acid (trans) + isoCrotonic acid (cis)		5
08.073	2-Decenoic acid		5
08.074	3-Decenoic acid		
08.075	4-Decenoic acid		
08.076			
08.077			
08.078			
08.079			
08.080	3,4,5-Trihydroxybenzoic acid;	3,4,5-trihydroxybenzoic acid	1
08.081	3,7- Dimethyl-2(trans),6-octadienoic acid; 3,7-dimethylocta-2,6-dienoic acid	3,7-dimethyl-2(trans),6-Octadienoic acid	
08.082		Pentanedioic acid	1
08.083			5
08.084			
08.085			5
08.086	Propanoic acid, 3-hydroxy-2-oxo-; 3-Hydroxy-2-oxopropanoic acid		
08.087	Syringic acid		
08.088	Sinapic acid	3-(4-Hydroxy-3,5-dimethoxyphenyl)prop-2-enoic acid	
08.089	Ferulic acid	3-(4-Hydroxy-3-methoxyphenyl)prop-2-enoic acid	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
08.090	09	498-36-2	2-Hydroxy-4-methylvaleric acid		10118	207-860-8
08.091	04	506-32-1	Icosa-5,8,11,14-tetraenoic acid			208-033-4
08.092	23	586-38-9	3-Methoxybenzoic acid	3944		209-574-9
08.093	09	39748-49-7	3-Methyl-2-oxovaleric acid	3870	10146	254-616-1
08.094	02	24323-24-8	4-Methyldecanoic acid			
08.095	02	5601-60-5	8-Methyldecanoic acid			
08.096	02	3780-58-3	3-Methylhexanoic acid			
08.097	02	1561-11-1	4-Methylhexanoic acid			216-336-8
08.099	03	10321-71-8	4-Methylpent-2-enoic acid			233-706-4
08.100	04	504-85-8	4-Methylpent-3-enoic acid			
08.101	03	3760-11-0	Non-2-enoic acid	3954	10153	223-171-5
08.102	04	4124-88-3	Non-3-enoic acid		10154	223-932-1
08.103	09	123-99-9	Nonanedioic acid		10079	204-669-1
08.105	04	1577-19-1	Oct-3-enoic acid		10157	216-418-3
08.106	04	463-40-1	Octadeca-9,12,15-trienoic acid	3380	695	207-334-8
08.107	03	13991-37-2	Pent-2-enoic acid		10163	237-791-9
08.108	22	492-37-5	2-Phenylpropionic acid		10164	207-752-0
08.109	30	156-06-9	3-Phenylpyruvic acid	3892		205-847-1
08.110	30	88-99-3	Phthalic acid			201-873-2
08.111	30	36413-60-2	Quinic acid			253-023-5
08.112	23	69-72-7	Salicylic acid		10165	200-712-3
08.113	09	150-90-3	Succinic acid, disodium salt	3277	24	203-740-4
08.114	03	1871-67-6	2-Octenoic acid	3957	10156	216-001-6
08.115	02	3302-03-2	4-Methylheptanoic acid			
08.118	09	110-16-7	cis-2-Butenedioic acid			203-742-5
08.119	03	1191-04-4	2-Hexenoic acid	3169	11777	214-727-8
08.120	03	13201-46-2	2-Methyl-2-butenic acid	3599	10168	236-167-3
08.122	04	1617-32-9	trans-3-Pentenoic acid			216-573-7
08.123	03	10352-88-2	trans-2-Heptenoic acid	3920		233-769-8
08.124	04	28163-84-0	trans-3-Heptenoic acid			248-876-5
08.125	04	5163-67-7	trans-3-Octenoic acid			225-941-6
08.126	03	32466-55-0	trans-2-Tridecenoic acid			251-062-2
08.127	22		2-(4-Methoxyphenoxy)propionic acid			
08.128	03		2-Methylbut-2(cis)-enoic acid			
09.001	01	141-78-6	Ethyl acetate	2414	191	205-500-4
09.002	01	109-60-4	Propyl acetate	2925	192	203-686-1
09.003	05	108-21-4	Isopropyl acetate	2926	193	203-561-1
09.004	01	123-86-4	Butyl acetate	2174	194	204-658-1
09.005	02	110-19-0	Isobutyl acetate	2175	195	203-745-1
09.006	01	142-92-7	Hexyl acetate	2565	196	205-572-1
09.007	01	112-14-1	Octyl acetate	2806	197	203-939-6
09.008	01	143-13-5	Nonyl acetate	2788	198	205-585-8
09.009	01	112-17-4	Decyl acetate	2367	199	203-942-2

FL No	Synonyms	Systematic name	Comments
08.090			
08.091	Arachidonic acid		
08.092	m-Anisic acid; 3-Anisic acid		
08.093	Methyl ethyl pyruvic acid; Sodium 3-methyl-2-oxopentanoic acid		
08.094			
08.095			
08.096			
08.097			
08.099	4-methylpent-2-en-1-oic acid		
08.100			
08.101			5
08.102			
08.103	Azelaic acid		
08.105			
08.106	Linolenic acid		5
08.107			5
08.108	Hydratropic-acid-		
08.109	3-Phenyl-2-oxopropanoic acid	3-Oxo-3-phenylpropanoic acid	
08.110	o-Dicarboxybenzene; o-Benzenedicarboxylic acid;	1,2-Benzenedicarboxylic acid	1
08.111	1,3,4,5-tetrahydroxycyclohexanecarboxylic acid	1,3,4,5-tetrahydroxy cyclohexane-1-carboxylic acid	
08.112	2-Hydroxybenzoic acid;	2-Hydroxy-benzoic acid	
08.113			5
08.114	Trans-2-Octenoic acid	Oct-2-enoic acid	5
08.115			
08.118	Maleic acid		
08.119			5
08.120			5
08.122			
08.123			
08.124			
08.125			
08.126			
08.127	Lactisol		
08.128	Angelic acid		
09.001	Acetic ether		
09.002	Propyl ethanoate		
09.003	Propyl iso acetate		
09.004	Butyl ethanoate		
09.005	Butyl iso acetate; 2-Methyl-1-propyl acetate; Iso-butyl acetate	2-Methylpropyl acetate	
09.006	Hexyl ethanoate; 1-Acetoxy-hexane,		
09.007	Acetate C-8; n-Octanyl acetate; 2-Ethyl hexyl acetate; Octyl ethanoate		
09.008	Acetate C-9; Pelargonyl acetate; Nonyl ethanoate		
09.009	Acetate C-10; Decyl ethanoate; Decanyl acetate; 1-Acetoxydecane; Acetic acid decyl ester; Decanol acetate		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.010	01	112-66-3	Dodecyl acetate	2616	200	203-995-1
09.011	03	105-87-3	Geranyl acetate	2509	201	203-341-5
09.012	04	150-84-5	Citronellyl acetate	2311	202	205-775-0
09.013	06	115-95-7	Linalyl acetate	2636	203	204-116-4
09.014	23	140-11-4	Benzyl acetate	2135	204	205-399-7
09.015	06	80-26-2	alpha-Terpinyl acetate	3047	205	201-265-7
09.016	08	29066-34-0	Menthyl acetate	2668	206	240-459-6
09.017	08	76-49-3	Bornyl acetate	2159	207	200-964-4
09.018	22	103-54-8	Cinnamyl acetate	2293	208	203-121-9
09.019	23	104-21-2	p-Anisyl acetate	2098	209	203-185-8
09.020	18	93-28-7	Eugenyl acetate	2469	210	202-235-6
09.021	01	628-63-7	Pentyl acetate		211	211-047-3
09.022	01	112-06-1	Heptyl acetate	2547	212	203-932-8
09.023	01	79-20-9	Methyl acetate	2676	213	201-185-2
09.024	02	123-92-2	Isopentyl acetate	2055	214	204-662-3
09.025	02	10031-87-5	2-Ethylbutyl acetate	2425	215	233-095-4
09.026	22	7493-78-9	alpha-Pentylcinnamyl acetate	2064	216	231-339-4
09.027	08	622-45-7	Cyclohexyl acetate	2349	217	210-736-6
09.028	07	21722-83-8	2-Cyclohexylethyl acetate	2348	218	2266952
09.029	06	103-07-1	1,1-Dimethyl-3-phenylpropyl acetate	2735	219	203-077-0
09.030	17	93-29-8	2-Methoxy-4-(prop-1-enyl)phenyl acetate	2470	220	202-236-1
09.031	15	103-45-7	Phenethyl acetate	2857	221	203-113-5
09.032	22	122-72-5	3-Phenylpropyl acetate	2890	222	204-569-8

FL No	Synonyms	Systematic name	Comments
09.010	Lauryl acetate; Acetate C-12; Dodecanyl acetate; Lauryl ethanoate; Dodecanyl ethanoate		
09.011	Geraniol acetate; trans-3,7-Dimethyl-2,6-octadien-1-yl acetate; 2,6-Dimethyl-2,6-octadiene-8-yl acetate	3,7-Dimethylocta-2(trans), 6-dienyl acetate	
09.012	3,7-Dimethyl-6-octen-1-yl acetate; 3,7-Dimethyl-6-octen-1-yl ethanoate	3,7-Dimethyloct-6-enyl acetate	
09.013	Bergamol; 3,7-Dimethyl-1,6-octadien-3-yl acetate, Licareol acetate, Linalool acetate	1,5-Dimethyl-1-vinylhex-4-enyl acetate	
09.014	Benzyl ethanoate		
09.015	3-Cyclohexene-1-methanol, alpha,alpha, 4-trimethyl, acetate;	p-Menth-1-en-8-yl acetate	5
09.016	l-p-Menth-3-yl acetate; Menthol acetate; 1-Isopropyl-4-methylcyclohex-2-yl acetate;	(1-alpha, 2-beta, 5-alpha)-2-Isopropyl-5-methylcyclohexyl acetate	4
09.017	Borneol acetate; 2-Camphanyl acetate; Bornyl ethanoate; l-Bornyl acetate; d-Bornyl acetate; Bornyl acetic ether;	1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-yl acetate	
09.018	3-Phenyl-2-propen-1-yl acetate; 3-Phenylallyl acetate;	3-Phenylprop-2-enyl acetate	
09.019	Benzenemethanol, 4-methoxy-, acetate; Anisyl alcohol, acetate; Benzyl alcohol, p-Methoxy, acetate;	4-Methoxybenzyl acetate	
09.020	Eugenol acetate; Aceteugenol; 2-Methoxy-4-phenyl acetate; Acetyl eugenol;	4-Allyl-2-methoxyphenyl acetate	
09.021	Amyl acetate		
09.022	Acetate C-7; Heptanyl acetate; Heptyl ethanoate,		
09.023	Methyl ethanoate;		
09.024	Isoamyl acetate; beta-Methyl butyl acetate; Amyl acetate common; Amyl iso acetate; Isoamyl ethanoate	3-Methylbutyl acetate	
09.025	beta-Ethylbutyl acetate		
09.026	alpha-n-Amyl-beta-phenylacryl acetate; alpha-Pentylcinnamyl acetate; Floxin acetate	2-Pentyl-3-phenylprop-2-enyl acetate	
09.027	Cyclohexane acetate;		
09.028	Cyclohexane ethyl acetate; Ethylcyclohexyl acetate; Hexahydrophenyl ethyl acetate		
09.029	Dimethyl phenethyl carbonyl acetate; 1,1-Dimethyl-3-phenylpropan-1-yl acetate; 2-Methyl-4-phenyl-2-butyl acetate		
09.030	Isoeugenyl acetate; Isoeugenol acetate; 2-Methoxy-4-propenyl phenyl acetate; Acetisoeugenol		
09.031	2-Phenylethyl acetate; Benzyl carbonyl acetate;		
09.032	Phenylpropyl acetate; 3-phenyl-1-propyl acetate; Hydrocinnamyl acetate; beta-Phenylpropyl acetate		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.033	04	141-11-7	Rhodinyl acetate	2981	223	205-458-7
09.034	07	1323-00-8	Santalyl acetate	3007	224	2153496
09.035	23	881-68-5	Vanillyl acetate	3108	225	212-920-1
09.036	25	140-39-6	p-Tolyl acetate	3073	226	205-413-1
09.037	01	140-88-5	Ethyl acrylate	2418	245	205-438-8
09.038	01	623-42-7	Methyl butyrate	2693	263	210-792-1
09.039	01	105-54-4	Ethyl butyrate	2427	264	203-306-4
09.040	01	105-66-8	Propyl butyrate	2934	266	203-320-0
09.041	05	638-11-9	Isopropyl butyrate	2935	267	211-320-7
09.042	01	109-21-7	Butyl butyrate	2186	268	203-656-8
09.043	02	539-90-2	Isobutyl butyrate	2187	269	208-729-8
09.044	01	540-18-1	Pentyl butyrate	2059	270	208-739-2
09.045	01	2639-63-6	Hexyl butyrate	2568	271	220-136-6
09.046	01	110-39-4	Octyl butyrate	2807	272	203-762-4
09.047	01	5454-09-1	Decyl butyrate	2368	273	226-700-8
09.048	03	106-29-6	Geranyl butyrate	2512	274	203-381-3
09.049	04	141-16-2	Citronellyl butyrate	2312	275	205-463-4
09.050	06	78-36-4	Linalyl butyrate	2639	276	201-109-8
09.051	23	103-37-7	Benzyl butyrate	2140	277	203-105-1
09.052	06	2153-28-8	Terpinyl butyrate	3049	278	218-445-6
09.053	22	103-61-7	Cinnamyl butyrate	2296	279	203-128-7
09.054	03	2051-78-7	Allyl butyrate	2021	280	218-129-8

FL No	Synonyms	Systematic name	Comments
09.033	alpha-Citronellyl acetate	3,7-Dimethyloct-7-enyl acetate	
09.034	alpha-Santalol, acetate; β -Santalol, acetate;		4
09.035	Acetyl vanillin; Benzaldehyde, 4-(acetyloxy)-3-methoxy-; 3-Methoxy-4-acetoxybenzaldehyde;	4-Acetoxy-3-methoxybenzaldehyde	
09.036	p-Cresyl acetate; 4-methylbenzoic acid methyl ester; Acetyl p-Cresol; p-Tolyl ethanoate; p-Cresylic acetate	4-Methylphenyl acetate	
09.037	Ethyl propenoate	Ethyl prop-2-enoate	
09.038	Methyl butanoate		
09.039	Ethyl n-butanoate; Butyric ether; Ethyl butanoate		
09.040	Propyl butanoate		
09.041	Propyl iso butyrate; Propyl iso butanoate; Isopropyl butanoate		
09.042	Butyl butanoate		
09.043	Butyl iso butyrate; 2-Methyl-1-propyl butyrate; Isobutyl butanoate	2-Methylpropyl butanoate	
09.044	Amyl butyrate; Amyl butanoate		
09.045	n-Hexyl n-butanoate; Hexyl butanoate		
09.046	Octyl butanoate,		
09.047	Decyl butanoate; 1-Butyroxy decane,		
09.048	trans-3,7-Dimethyl-2,6-octadien-1-yl butanoate	3,7-Dimethylocta-2(trans), 6-dienyl butanoate	
09.049	3,7-Dimethyl-6-octen-1-yl butyrate	3,7-Dimethyloct-6-enyl butanoate	
09.050	3,7-Dimethyl-1,6-octadien-3-yl butyrate; Linalyl n-butyrate	1,5-Dimethyl-1-vinylhex-4-enyl butanoate	
09.051	Benzyl n-butyrate; Benzyl n-butanoate; Benzyl butanoate;		
09.052	p-Menth-1-en-8-yl butyrate; p-Menth-1-en-8-ol butyrate;	p-Menth-1-en-8-yl butanoate	
09.053	Phenylpropenyl-n-butyrate; 3-Phenyl-2-propen-1-yl butanoate; Butyric acid, 3-phenyl-2-propen-1-yl ester;	3-Phenylprop-2-enyl butanoate	
09.054	Allyl-n-butyrate; Vinyl carbinyl butyrate; 2-Propen-1-yl butanoate; Allyl butanoate;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.055	02	106-27-4	3-Methylbutyl butyrate	2060	282	203-380-8
09.057	22	80866-83-7	2-Phenylpropyl butyrate	2891	285	279-587-2
09.058	23	6963-56-0	p-Anisyl butyrate	2100	286	230-163-5
09.059	01	110-38-3	Ethyl decanoate	2432	309	203-761-9
09.060	01	123-66-0	Ethyl hexanoate	2439	310	204-640-3
09.061	01	626-77-7	Propyl hexanoate	2949	311	210-963-0
09.062	05	2311-46-8	Isopropyl hexanoate	2950	312	219-000-9
09.063	01	626-82-4	Butyl hexanoate	2201	313	210-964-6
09.064	02	105-79-3	Isobutyl hexanoate	2202	314	203-332-6
09.065	01	540-07-8	Pentyl hexanoate	2074	315	208-732-4
09.066	01	6378-65-0	Hexyl hexanoate	2572	316	228-952-4
09.067	03	10032-02-7	Geranyl hexanoate	2515	317	233-102-0
09.068	06	7779-23-9	Linalyl hexanoate	2643	318	231-922-3
09.069	01	106-70-7	Methyl hexanoate	2708	319	203-425-1
09.070	02	2198-61-0	3-Methylbutyl hexanoate	2075	320	218-600-8
09.071	22	6281-40-9	3-Phenylpropyl hexanoate	2896	321	228-490-3
09.072	01	109-94-4	Ethyl formate	2434	339	203-721-0
09.073	01	110-74-7	Propyl formate	2943	340	203-798-0
09.074	01	112-23-2	Heptyl formate	2552	341	203-949-0

FL No	Synonyms	Systematic name	Comments
09.055	Isoamyl butyrate; Isoamyl n-butyrate		
09.057	alpha-Phenylpropyl alcohol, butyric ester; beta-methylphenethyl butyrate; Hydratropyl butyrate		
09.058	Benzyl alcohol, p-methoxy, butyrate; Butyric acid, p-methoxybenzyl ester;	4-Methoxybenzyl butanoate	
09.059	Ethyl caprate; Ethyl decylate; Ethyl caprinate		
09.060	Ethyl caproate; Capronic ether absolute; Ethyl capronate		
09.061	Propyl caproate;		
09.062	Propyl iso hexanoate; Propyl iso Hexylate; Isopropyl capronate; Isopropyl caproate		
09.063	Butyl caproate;		
09.064	Isobutyl caproate; Butyl iso hexanoate; Butyl iso caproate	2-Methylpropyl hexanoate	
09.065	Amyl hexanoate; Amyl caproate; Pentyl caproate,		
09.066	Hexyl caproate;		
09.067	Geranyl caproate; trans-3,7-Dimethyl-2,6-octadien-1-yl hexanoate	3,7-Dimethylocta-2(trans), 6-dienyl n-hexanoate	
09.068	3,7-Dimethyl-1,6-octadien-3-yl hexanoate; Linalyl caproate; Linalyl hexoate; Linalyl hexylate	1,5-Dimethyl-1-vinylhex-4-enyl hexanoate	
09.069	Methyl caproate;		
09.070	Isoamyl hexanoate; Isoamyl caproate; Isopentyl n-hexanoate; Pentyl iso hexanoate; Pentyl iso caproate Isopentyl hexanoate		
09.071	Hydrocinnamyl hexanoate; Hydrocinnamylcaproate; 3-Phenylpropyl caproate;		
09.072	Ethyl methanoate; Formic ether		
09.073	Propyl methanoate		
09.074	n-Heptyl methanoate; Heptyl methanoate;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.075	01	112-32-3	Octyl formate	2809	342	203-959-5
09.076	03	105-86-2	Geranyl formate	2514	343	203-339-4
09.077	23	104-57-4	Benzyl formate	2145	344	203-214-4
09.078	04	105-85-1	Citronellyl formate	2314	345	203-338-9
09.079	04	141-09-3	Rhodinyll formate	2984	346	205-456-6
09.080	06	115-99-1	Linalyl formate	2642	347	204-120-6
09.081	06	2153-26-6	alpha-Terpinyll formate	3052	348	218-444-0
09.082	08	7492-41-3	Bornyl formate	2161	349	231-319-5
09.083	15	104-62-1	Phenethyl formate	2864	350	203-220-7
09.084	22	104-64-3	3-Phenylpropyl formate	2895	351	203-222-8
09.085	22	104-65-4	Cinnamyl formate	2299	352	203-223-3
09.086	06	10058-43-2	2-Methyl-1-phenyl-2-propyl formate	2395	353	
09.087	23	122-91-8	p-Anisyl formate	2101	354	204-582-9
09.088	18	10031-96-6	4-Eugenyl formate	2473	355	233-099-6
09.089	17	7774-96-1	Isoeugenyl formate	2474	356	231-884-8
09.090	22	7493-79-0	alpha-Pentylcinnamyl formate	2066	357	231-341-5
09.091	01	5454-28-4	Butyl heptanoate	2199	363	226-707-6
09.092	02	7779-80-8	Isobutyl heptanoate	2200	364	231-940-1
09.093	01	106-30-9	Ethyl heptanoate	2437	365	203-382-9
09.094	01	5132-75-2	Octyl heptanoate	2810	366	225-882-6
09.095	01	7778-87-2	Propyl heptanoate	2948	367	231-917-6
09.096	01	106-73-0	Methyl heptanoate	2705	368	203-428-8
09.097	03	142-19-8	Allyl heptanoate	2031	369	205-527-1
09.098	01	7493-82-5	Pentyl heptanoate	2073	370	231-342-0

FL No	Synonyms	Systematic name	Comments
09.075	Octyl mehtanoate;		
09.076	trans-3,7-Dimethyl-2,6-octadien-1-yl formate; trans-3,7-Dimethyl-2,6-octadien-1-yl-methanoate; Geranyl methanoate	3,7-Dimethylocta-2(trans),6-dienyl formate	
09.077	Formic acid benzyl ester; Benzyl methanoate;		
09.078	3,7-Dimethyl-6-octen-1-yl formate; 3,7-Dimethyl-6-octen-1-yl methanoate	3,7-Dimethyloct-6-enyl formate	
09.079	alpha-Citronellyl formate	3,7-Dimethyloct-7-enyl formate	
09.080	3,7-Dimethyl-1,6-octadien-3-yl formate; Linalool formate	1,5-Dimethyl-1-vinylhex-4-enyl formate	
09.081	p-Menth-1-en-8-yl formate;		
09.082	Bornyl methanoate; Borneol formate; d-Bornyl formate; endo-2-Bornanyl formate; 2-Camphanyl formate; l-Bornyl formate;	1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-yl formate	
09.083	2-Phenylethyl formate; 2-Phenylethyl methanoate; Benzylcarbinyll formate; Benzylcarbinyll methanoate		
09.084	Phenylpropyl formate; Hydrocinnamyl formate; Hydrocinnamyl methanoate; beta-Phenylpropyl formate;		
09.085	3-Phenyl-2-propen-1-yl formate; 3-Phenylallyl formate; Cinnamyl methanoate;	3-Phenylprop-2-enyl formate	
09.086	alpha,alpha-dimethylphenethyl formate; 2-Benzyl-2-propyl formate; Benzyl dimethyl carbinyll formate; Dimethyl benzyl carbinyll formate		
09.087	Anisyl alcohol, formate; Anisyl methanoate; p-Methoxybenzyl methanoate; Benzenemethanol, 4-methoxy-, formate;	4-Methoxybenzyl formate	
09.088	Eugenol formate	4-Allyl-2-methoxyphenyl formate	
09.089	4-Methoxy-4-phenyl formate; 2-Methoxy-4-propenylphenyl formate;	2-Methoxy-4-(prop-1-enyl)phenyl formate	
09.090	alpha-n-Amyll-phenylacryll formate; alpha-Pentylcinnamyl formate	2-Pentyl-3-phenylprop-2-enyl formate	
09.091	Butyl heptylate; Butyl oenanthate,		
09.092	Isobutyl heptylate; Butyl iso heptanoat; Isobutyl heptoate; 2-Methyl-1-propyl heptanoate	2-Methylpropyl heptanoate	
09.093	Ethyl heptylate; Ethyl heptoate; Ethyl oenanthate; Oenanthic ester		
09.094	Octyl heptylate; Octyl oenanthate,		
09.095	Propyl heptylate; Propyl heptoate; Propyl oenanthate		
09.096	Methyl heptoate; Methyl oenanthate,		
09.097	Allyl heptylate; Allyl heptoate; Allyl enanthate; Allyl oenanthate;		
09.098	Amyll heptanoate; Amyll heptylate; Amyll heptoate; Amyll oenanthate,		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.099	01	106-33-2	Ethyl dodecanoate	2441	375	203-386-0
09.100	01	106-18-3	Butyl dodecanoate	2206	376	203-370-3
09.101	01	111-82-0	Methyl dodecanoate	2715	377	203-911-3
09.102	25	10024-57-4	p-Tolyl dodecanoate	3076	378	233-024-7
09.103	02	6309-51-9	3-Methylbutyl dodecanoate	2077	379	228-626-1
09.104	01	124-06-1	Ethyl tetradecanoate	2445	385	204-675-4
09.105	05	110-27-0	Isopropyl tetradecanoate	3556	386	203-751-4
09.106	01	124-10-7	Methyl tetradecanoate	2722	387	204-680-1
09.107	01	123-29-5	Ethyl nonanoate	2447	388	204-615-7
09.108	01	1731-84-6	Methyl nonanoate	2724	389	217-052-7
09.109	03	7493-72-3	Allyl nonanoate	2036	390	231-334-7
09.110	02	7779-70-6	3-Methylbutyl nonanoate	2078	391	231-933-3
09.111	01	106-32-1	Ethyl octanoate	2449	392	203-385-5
09.112	01	638-25-5	Pentyl octanoate	2079	393	211-328-0
09.113	01	1117-55-1	Hexyl octanoate	2575	394	214-247-9
09.114	01	2306-88-9	Octyl octanoate	2811	395	218-980-5
09.115	01	7786-48-3	Nonyl octanoate	2790	396	232-099-3
09.116	06	10024-64-3	Linalyl octanoate	2644	397	233-026-8
09.117	01	111-11-5	Methyl octanoate	2728	398	203-835-0
09.118	01	4265-97-8	Heptyl octanoate	2553	399	224-252-8
09.119	03	4230-97-1	Allyl octanoate	2037	400	224-184-9
09.120	02	2035-99-6	3-Methylbutyl octanoate	2080	401	218-004-8
09.121	01	105-37-3	Ethyl propionate	2456	402	203-291-4
09.122	01	106-36-5	Propyl propionate	2958	403	203-389-7
09.123	05	637-78-5	Isopropyl propionate	2959	404	211-300-8
09.124	01	590-01-2	Butyl propionate	2211	405	209-669-5

FL No	Synonyms	Systematic name	Comments
09.099	Ethyl laurate; Ethyl dodecylate;		
09.100	Butyl laurate; Butyl dodecylate		
09.101	Methyl laurate; Methyl dodecylate,		
09.102	p-Cresyl dodecanoate; p-Cresyl laurate; p-Methylphenyl dodecanoate;	4-Methylphenyl dodecanoate	
09.103	Isoamyl laurate; Isoamyl dodenanoate; Amyl iso laurate; Pentyl iso laurate; Isopentyl laurate,		
09.104	Ethyl myristate;		
09.105	Isopropyl myristate;		
09.106	Methyl myristate;		
09.107	Ethyl pelargonate; Ethyl nonylate		
09.108	Methyl nonylate; Methyl pelargonate,		
09.109	2-Propenyl nonanoate; Allyl pelargonate; Allyl nonylate; 2-Propenyl pelargonate;		
09.110	Isoamyl pelargonate; Pentyl iso nonanoate; Isopentyl nonanoate; Amyl iso nonanoate; Isopentyl nonylate; Isoamyl nonylate		
09.111	Ethyl caprylate; Ethyl octylate		
09.112	Amyl octanoate; Amyl caprylate; Amyl octylate; Pentyl octylate,		
09.113	Hexyl caprylate; Hexyl octylate,		
09.114	Octyl octylate		
09.115	Nonyl octylate		
09.116	3,7-Dimethyl-1,6-octadien-3-yl octanoate; Linalyl caprylate; Linalyl octoate; Linalyl octylate	1,5-Dimethyl-1-vinylhex-4-enyl octanoate	
09.117	Methyl octylate		
09.118	Heptyl caprylate		
09.119	Allyl caprylate; 2-Propenyl octanoate; 2-Propenyl octylate; Allyl octylate		
09.120	Isoamyl octanoate; Isopentyl octanoate; Pentyl iso octanoate; Isoamyl caprylate; Isopentyl octylate		
09.121	Ethyl propanoate, Propionic ether		
09.122	Propyl propanoate; n-Propyl propionate;		
09.123	Propyl iso propionate,		
09.124	Butyl propanoate		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.125	02	540-42-1	Isobutyl propionate	2212	406	208-746-0
09.126	01	142-60-9	Octyl propionate	2813	407	205-548-6
09.127	01	5454-19-3	Decyl propionate	2369	408	226-703-4
09.128	03	105-90-8	Geranyl propionate	2517	409	203-344-1
09.129	04	141-14-0	Citronellyl propionate	2316	410	205-461-3
09.130	06	144-39-8	Linalyl propionate	2645	411	205-627-5
09.131	08	2756-56-1	Isobornyl propionate	2163	412	220-410-5
09.132	23	122-63-4	Benzyl propionate	2150	413	204-559-3
09.133	22	103-56-0	Cinnamyl propionate	2301	414	203-124-5
09.134	01	554-12-1	Methyl propionate	2742	415	209-060-4
09.135	01	624-54-4	Pentyl propionate		416	210-852-7
09.136	02	105-68-0	3-Methylbutyl propionate	2082	417	203-322-1
09.137	15	122-70-3	Phenethyl propionate	2867	418	204-567-7
09.138	22	122-74-7	3-Phenylpropyl propionate	2897	419	204-571-9
09.139	01	2445-76-3	Hexyl propionate	2576	420	219-495-1
09.140	08	6222-35-1	Cyclohexyl propionate	2354	421	228-303-5
09.141	04	105-89-5	Rhodinyl propionate	2986	422	203-343-6
09.142	06	80-27-3	Terpinyl propionate	3053	423	201-266-2
09.143	08	97-45-0	Carvyl propionate	2251	424	202-583-9
09.144	21	120-45-6	1-Phenethyl propionate	2689	425	204-397-3
09.145	23	7549-33-9	p-Anisyl propionate	2102	426	231-433-5

FL No	Synonyms	Systematic name	Comments
09.125	Butyl iso propionate; Isobutyl propanoate	2-Methylpropyl propanoate	
09.126	Octyl propanoate		
09.127	Decyl propanoate; 1-Propionoxy decane,		
09.128	trans-3,7-Dimethyl-2,6-octadien-1-yl propanoate; 2,6-Dimethyl octadien-6-yl-8-n-propionate	3,7-Dimethylocta-2(trans), 6-dienyl propanoate	
09.129		3,7-Dimethyloct-6-enyl propanoate	
09.130	3,7-Dimethyl-1,6-octadien-3-yl propanoate; 3,7-Dimethyl-1,6-octadien-3-yl propionate	1,5-Dimethyl-1-vinylhex-4-enyl propanoate	
09.131		1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl propanoate	
09.132	Benzyl propanoate; Benzylpropanoate		
09.133	3-Phenyl-2-propen-1-yl propanoate; gamma-Phenylallyl propionate;	3-Phenylprop-2-enyl propanoate	
09.134	Methyl propanoate		
09.135	Pentyl propanoate; Amyl propionate,		
09.136	Isoamyl propionate; Isopentyl propionate; Isopentyl propanate; Isoamyl propanoate,		
09.137	Phenylethyl propionate; 2-Phenylethyl propanoate; Benzylcarbonyl propionate;		
09.138	Phenylpropyl propionate; Hydrocinnamyl propionate; beta-Phenylpropyl propanoate; 3-Phenylpropyl propanoate;		
09.139	Hexyl propanoate,		
09.140			
09.141	alpha-Citronellyl propionate	3,7-Dimethyloct-7-enyl propanoate	
09.142	p-Menthanyl propionate (mixed isomers - according to FEMA); p-Menth-1-en-8-yl propionate	p-Menth-1-en-8-yl propanoate	
09.143	l-Carveol propionate; p-Mentha-6,8-dien-2-yl propionate;	p-Mentha-6,8-dien-2-yl propanoate	
09.144	alpha-Methylbenzyl propionate; 1-Phenyl-1-ethyl propionate; Methyl phenylcarbonyl propionate		
09.145	Benzenemethanol, 4-methoxy-, propionate;	4-Methoxybenzyl propanoate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.146	03	7493-76-7	Allyl undec-10-enoate	2044	441	231-337-3
09.147	01	539-82-2	Ethyl valerate	2462	465	208-726-1
09.148	01	591-68-4	Butyl valerate	2217	466	209-728-5
09.149	01	2173-56-0	Pentyl valerate		467	218-528-7
09.150	03	10402-47-8	Geranyl valerate		468	233-869-1
09.151	04	7540-53-6	Citronellyl valerate	2317	469	231-416-2
09.152	23	10361-39-4	Benzyl valerate		470	233-789-7
09.153	08	7549-41-9	Bornyl valerate	2164	471	231-435-6
09.154	08	89-47-4	Menthyl valerate		472	201-910-2
09.156	01	111-80-8	Methyl 2-nonynoate	2726	479	203-909-2
09.157	01	10031-92-2	Ethyl 2-nonynoate	2448	480	233-098-0
09.158	01	111-12-6	Methyl 2-octynoate	2729	481	203-836-6
09.159	01	638-49-3	Pentyl formate	2068	497	211-340-6
09.160	08	4351-54-6	Cyclohexyl formate	2353	498	224-415-3
09.161	01	629-33-4	Hexyl formate	2570	499	211-087-1
09.162	02	110-45-2	3-Methylbutyl formate	2069	500	203-769-2
09.163	01	592-84-7	Butyl formate	2196	501	209-772-5
09.164	02	542-55-2	Isobutyl formate	2197	502	208-818-1
09.165	05	625-55-8	Isopropyl formate	2944	503	210-901-2
09.166	01	5870-93-9	Heptyl butyrate	2549	504	227-526-5
09.167	03	999-40-6	Neryl butyrate	2774	505	213-660-1
09.168	15	103-52-6	Phenethyl butyrate	2861	506	203-119-8
09.169	03	105-91-9	Neryl propionate	2777	509	203-345-7
09.171	08	77-54-3	Cedryl acetate		527	201-036-1

FL No	Synonyms	Systematic name	Comments
09.146	Allyl undecylenate; 2-Propenyl 10-undecenoate; Allyl hendecenoate; Allyl undecylenoate.		
09.147	Ethyl pentanoate; Ethyl valerianate		
09.148	Butyl valerianate; Butyl pentanoate,		
09.149	Amyl pentanoate; Amyl valerate,		
09.150	Geranyl pentanoate; 2,6-Dimethyl-2,6-octadiene-8-yl pentanoate	3,7-Dimethylocta-2(trans),6-dienyl pentanoate	
09.151	3,7-Dimethyl-6-octen-1-yl pentanoate	3,7-Dimethyloct-6-enyl pentanoate	
09.152	Benzyl valeriate; Benzyl pentanoate; Phenyl methyl pentanoate		
09.153	Bornyl pentanoate; Bornyl valerianate; Bornyl n-pentanoate; endo-2-Camphanil valerate; endo-2-Bornyl valerate;	1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-yl pentanoate	
09.154	Menthyl pentanoate	p-Menthan-3-yl pentanoate	
09.156	Methyl octine carbonate; Methyl octyne carbonate;		
09.157	Ethyl octyne carbonate; Ethyl octyne carboxylate; Ethyl non-2-yanoate; Ethyl hexyl propiolate		
09.158	Methyl heptine carbonate; Methyl heptyne carbonate; Methyl oct-2-yanoate; Methyl pentylpropiolate		
09.159	Amyl formate; Amyl formiat; Amyl methanoate; n-Pentyl methanoate		
09.160			
09.161	n-Hexyl formate; Hexyl methanoate; Formic acid hexyl ester		
09.162	Isoamyl formate; Isopentyl formate; Amyl iso formate; Pentyl iso formate; Isopentyl methanoate; Amyl iso methanoate; Isoamyl methanoate		
09.163	Butyl methanoate		
09.164	Tetryl formate; Butyl iso formate; Isobutyl methanoate; 2-Methyl-1-propyl formate	2-Methylpropyl formate	
09.165	Propyl iso formate; Propyl iso Methanoate; Isopropyl methanoate		
09.166	Heptyl butanoate		
09.167	cis-3,7-Dimethyl-2,6-octadien-1-yl butanoate	3,7-Dimethyl-2(cis), 6-octadienyl butanoate	
09.168	beta-Phenethyl n-butanoate; 2-Phenylethyl butanoate; 2-Phenylethyl butyrate; Benzylcarbinylyl butyrate;		
09.169	cis-3,7-Dimethyl-2,6-octadien-1-yl propionate	3,7-Dimethyl-2(cis), 6-octadienyl propanoate	
09.171		2,6,6,8-Tetramethyl-tricyclo[5.3.1.0(1.5)]undecan-8-yl acetate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.172	08	6243-10-3	Cyclohexyl hexanoate		528	228-354-3
09.174	25	613-70-7	2-Methoxyphenyl acetate	3687	552	210-350-8
09.175	08	58479-55-3	Isobornyl butyrate		564	261-281-5
09.176	08	1200-67-5	Isobornyl formate	2162	565	214-853-3
09.177	03	7149-29-3	2-Methylallyl butyrate	2678	572	230-474-6
09.178	21	93-92-5	1-Phenethyl acetate	2684	573	202-288-5
09.179	21	7775-38-4	1-Phenethyl formate	2688	574	231-893-7
09.180	01	112-39-0	Methyl hexadecanoate		581	203-966-3
09.181	01	13894-63-8	Methyl hex-2-enoate	2709	583	237-663-2
09.182	01	624-24-8	Methyl valerate	2752	588	210-838-0
09.185	09	592-20-1	2-Oxopropyl acetate		607	209-746-3
09.186	10	4906-24-5	sec-Butan-3-onyl acetate	3526	608	
09.188	01	5933-87-9	Pentyl decanoate		611	227-682-4
09.189	21	10031-86-4	1-Phenylpropyl butyrate	2424	628	233-094-9
09.190	01	1552-67-6	Ethyl hex-2-enoate	3675	631	216-296-1
09.191	01	2396-83-0	Ethyl hex-3-enoate	3342		219-257-7
09.192	01	111-62-6	Ethyl oleate	2450	633	203-889-5
09.193	01	628-97-7	Ethyl hexadecanoate	2451	634	211-064-6
09.194	01	2396-84-1	Ethyl hexa-2,4-dienoate	2459	635	219-258-2
09.196	03	10094-40-3	Hex-2-enyl acetate	2564	643	233-223-9
09.197	04	3681-71-8	Hex-3(cis)-enyl acetate	3171	644	222-960-1
09.198	02	2050-09-1	Isopentyl valerate		648	218-081-8
09.200	21	10415-88-0	1-Methyl-3-phenylpropyl acetate	2882	671	233-890-6
09.201	15	7460-74-4	Phenethyl valerate		673	231-246-9
09.202	01	141-06-0	Propyl valerate		679	205-452-4
09.204	01	544-35-4	Ethyl octadeca-9,12-dienoate		711	208-868-4
09.205	01	1191-41-9	Ethyl octadeca-9,12,15-trienoate		712	214-734-6

FL No	Synonyms	Systematic name	Comments
09.172			
09.174	Guaiacyl acetate; 1-Acetoxy-2-methoxybenzene; Acetyl guaiacol; o-Methoxyphenyl acetate;		
09.175		1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl butanoate	
09.176	Isobornyl methanoate; exo-2-bornyl formate; exo-2-Camphanyl formate;	1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl formate	
09.177	2-Methyl-2-propen-1-yl butyrate; 2-Methylallyl butanoate; Isopropenyl carbonyl-n-butyrate; Methylallyl butyrate;	2-Methylprop-2-enyl butanoate	
09.178	Styrallyl acetate; alpha-Phenylethyl acetate; methyl phenylcarbonyl acetate; sec-Phenylethyl acetate	1-Phenylethyl acetate	
09.179	alpha-Methylbenzyl formate; 1-Phenyl-1-ethyl formate; Alpha-Methylbenzyl methanoate;		
09.180	Methyl palmitate;		
09.181	Methyl beta-Propylacrylate		
09.182	Methyl pentanoate; Methyl valerianate,		
09.185	Acetonyl acetate;		
09.186	2-Acetoxy-3-butanone; AMC acetate; Acetoin acetate; Acetyl methyl carbonyl acetate; 2-Butanon-3-yl acetate	1-Methyl-2-oxopropyl acetate	
09.188	Amyl caprate, Amyl caprinate,		
09.189	alpha-Ethylbenzyl butyrate; Ethyl phenyl carbonyl butyrate; 1-Phenyl-1-propyl butyrate; alpha-Phenylpropyl butyrate;		
09.190	Ethyl E-2-hexenoate		5
09.191			
09.192	Ethyl cis-9-Octadecenoate	Ethyl octadec-9-enoate	
09.193	Ethyl palmitate; Ethyl cetylate		
09.194	Ethyl sorbate; Ethyl 2,4-hexadienoate		
09.196	trans-2-Hexenyl acetate; 2-Hexen-1-yl acetate; 2-Hexenyl ethanoate		5
09.197	cis-3-Hexen-1-yl acetate; cis-3-hexenyl acetate; cis-3-Hexenyl ethanoate		
09.198	Isoamyl pentanoate	3-Methylbutyl pentanoate	
09.200	Methyl phenyl ethyl carbonyl acetate; 4-Phenyl-2-butyl acetate; Phenylethyl methyl carbonyl acetate;		
09.201	Phenethyl pentanoate		
09.202	Propyl pentanoate; Propyl valerate		
09.204	Ethyl linoleate;		
09.205	Ethyl linolenate;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.208	01	142-77-8	Butyl oleate		741	205-559-6
09.209	01	589-75-3	Butyl octanoate		742	209-659-0
09.210	01	111-61-5	Ethyl octadecanoate	3490	745	203-887-4
09.211	30	60-01-5	Glyceryl tributyrate	2223	747	200-451-5
09.212	03	2142-94-1	Neryl formate	2776	2060	218-401-6
09.213	03	141-12-8	Neryl acetate	2773	2061	2054592
09.214	04	112-19-6	Undec-10-enyl acetate	3096	2062	203-944-3
09.215	08	97-42-7	Carvyl acetate	2250	2063	202-580-2
09.216	08	20777-49-5	Dihydrocarvyl acetate	2380	2064	244-029-9
09.218	08	125-12-2	Isobornyl acetate	2160	2066	204-727-6
09.219	08	57576-09-7	Isopulegyl acetate	2965	2067	260-820-1
09.220	23	326-61-4	Piperonyl acetate	2912	2068	206-312-5
09.224	05	108-84-9	1,3-Dimethylbutyl acetate		2073	203-621-7
09.225	09	1322-17-4	1,3-Nonanediol acetate	2783	2075	215-332-3
09.226	09	7779-54-6	3-Oxononan-1-yl acetate		2076	
09.227	06	151-05-3	1,1-Dimethyl-2-phenethyl acetate	2392	2077	205-781-3
09.228	25	533-18-6	o-Tolyl acetate	3072	2078	208-556-8
09.230	08	1551-44-6	Cyclohexyl butyrate	2351	2082	216-290-9
09.231	21	3460-44-4	1-Phenethyl butyrate	2686	2083	222-409-5
09.232	06	10094-34-5	1,1-Dimethyl-2-phenethyl butyrate	2394	2084	233-221-8
09.233	03	2408-20-0	Allyl propionate	2040	2094	219-307-8
09.234	01	111-79-5	Methyl non-2-enoate	2725	2099	203-908-7
09.235	01	7492-45-7	Butyl dec-2-enoate	2194	2100	
09.236	01	5760-50-9	Methyl undec-9-enoate	2750	2101	227-279-3
09.237	01	692-86-4	Ethyl undec-10-enoate	2461	10634	211-734-8

FL No	Synonyms	Systematic name	Comments
09.208		Butyl octadec-9-enoate	
09.209	Butyl caprylate		
09.210	Ethyl stearate;		
09.211	Tributyryn; Glycerol tributyrate; Butyryn;		1
09.212	cis-3,7-Dimethyl-2,6-octadien-1-yl formate; cis-3,7-Dimethyl-2,6-octadien-1-yl methanoate	3,7-Dimethyl-2(cis), 6-octadienyl formate	
09.213	cis-3,7-Dimethyl-2,6-octadien-1-yl acetate; cis-3,7-Dimethyl-2,6-octadien-1-yl ethanoate	3,7-Dimethyl-2(cis), 6-octadienyl acetate	
09.214	Acetate C-11; 10-Hendecyl acetate; Undecylenic acetate; Undecenyl acetate		
09.215	Carveyl acetate; p-Mentha-6,8-dien-2-yl acetate	p-Mentha-6,8-dien-2-yl acetate	
09.216	6-Methyl-3-(1-methylvinyl)cyclohexyl acetate; Dihydrocarveyl acetate; 8-p-Menthen-2-yl acetate; 6-Methyl-3-isopropenylcyclohexenyl acetate	p-Menth-8-en-2-yl acetate	
09.218	Bornyl iso acetate; exo-2-Camphanyl acetate; Isobornyl ethanoate; exo-2-Bornyl acetate;	1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl acetate	
09.219	5-Methyl-2-isopropenylcyclohexyl acetate; Pulegol iso acetate; 1-Methyl-4-isopropenylcyclohexan-3-yl acetate;	p-Menth-8-en-3-yl acetate	
09.220	Heliotropyl acetate; 3,4-Methylene dioxybenzyl acetate; 1,3-Benzodioxole-5-methanol,acetate;	3,4-Methylenedioxybenzyl acetate	
09.224	4-Methyl-2-pentyl acetate; Methyl isobutyl carbonyl acetate		
09.225	1,3-Nonanediol acetate (mixed esters); Acetoxy nonyl acetate (mixed esters); Jasmonyl;	Nonan-1,3-diyl acetate	5
09.226			
09.227	2-Methyl-1-phenyl-2-propyl acetate; Benzyl dimethyl carbonyl acetate; Dimethylbenzyl carbonyl acetate;		
09.228	Acetyl o-Cresol; o-Cresol acetate; o-Cresyl acetate; o-Cresylic acetate	2-Methylphenyl acetate	
09.230	Cyclohexyl butanoate		
09.231	alpha-Methylbenzyl butyrate; Methyl phenyl carbonyl butyrate; Styrallyl butyrate; 1-Phenyl-1-ethyl butanoate;	1-Phenylethyl butyrate	
09.232	2-Methyl-1-phenyl-2-propyl butyrate; Benzyl dimethyl carbonyl butyrate; alpha, alpha-dimethylphenethyl butyrate;		
09.233	2-Propenyl propanoate; Allyl propanoate		
09.234	Methyl nonylenate; Methyl nonylenoate		
09.235			
09.236	Methyl undecylenate;		
09.237	Ethyl undecylenate;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.238	01	109-42-2	Butyl undec-10-enoate	2216	2103	203-670-4
09.239	01	10522-18-6	Methyl 2-undecynoate	2751	2111	
09.240	04	33467-73-1	Hex-3(cis)-enyl formate	3353	2153	251-532-7
09.244	03	123-68-2	Allyl hexanoate	2032	2181	204-642-4
09.246	01	123-95-5	Butyl octadecanoate	2214	2189	204-666-5
09.247	03	20474-93-5	Allyl crotonate		2222	243-845-2
09.248	01	623-70-1	Ethyl trans-2-butenolate	3486	2244	210-808-7
09.249	21	68922-11-2	1-Methyl-2-phenethyl butyrate	3197	2276	272-983-6
09.250	02	10588-10-0	Isobutyl valerate		2303	234-191-9
09.251	01	110-42-9	Methyl decanoate		2304	203-766-6
09.253	25	528-79-0	2-Isopropyl-5-methylphenyl acetate		2308	208-442-8
09.254	05	4864-61-3	3-Octyl acetate	3583	2347	225-471-1
09.256	01	6513-03-7	Propyl nonanoate		2351	229-403-1
09.258	30	3891-59-6	Glucose pentaacetate	2524		223-439-1
09.260	03	3025-30-7	Ethyldeca-2(cis),4(trans)-dienoate	3148	10574	221-178-8
09.261	15	6290-37-5	2-Phenethyl hexanoate	3221	10882	228-538-3
09.262	15	5457-70-5	Phenethyl octanoate	3222	10884	226-718-6
09.263	30	139-45-7	Glyceryl tripropionate	3286	10657	205-365-1
09.264	10	84642-61-5	sec-Butan-3-onyl butyrate	3332	10525	283-438-7
09.265	01	34495-71-1	Ethyl oct-4-enoate	3344	10619	252-065-1
09.266	01	19089-92-0	Hexyl 2-butenolate	3354	10688	242-808-8
09.267	01	2396-78-3	Methyl hex-3-enoate	3364	10801	219-256-1
09.268	01	21063-71-8	Methyl oct-4(cis)-enoate	3367	10834	244-188-4
09.269	08	13851-11-1	Fenchyl acetate	3390	11769	237-588-5
09.270	04	16491-36-4	Hex-3-enyl butyrate	3402	11859	240-553-7
09.271	04	31501-11-8	Hex-3-enyl hexanoate	3403	11779	250-661-6
09.272	07	72928-52-0	Myrtenyl formate	3405	10858	277-082-1
09.273	02	589-66-2	Isobutyl crotonate	3432	10706	209-658-5

FL No	Synonyms	Systematic name	Comments
09.238	Butyl undecylenate;		
09.239	Methyl decyne carbonate; Methyl decine carbonate; Methyl undec-2-ynoate; Methyl octyl propiolate		
09.240	beta, gamma-Hexenyl methanoate; (Z)-3-hexenol formate; Leaf alcohol formate; 3-Hexenyl methanoate		5
09.244	Allyl caproate; 2-Propenyl hexanoate;		
09.246	Butyl stearate;		
09.247		Allyl but-2(trans)-enoate	
09.248	Ethyl crotonate		
09.249	1-Phenyl-2-propyl butyrate; alpha-Methylphenethyl butyrate;		
09.250	Isobutyl pentanoate	2-Methylpropyl pentanoate	
09.251			
09.253	Thymyl acetate; Acetyl thymol;		
09.254	1-Ethyl hexyl acetate; n-Amyl ethyl carbinyl acetate	1-Ethylhexyl acetate	
09.256	Propyl pelargonate		
09.258	1,2,3,4,6-Pentaacetyl-alpha-d-Glucose; 1,2,3,4,6-Pentaacetyl-beta-d-Glucose; alpha-Pentaacetyl-dextro-Glucose;	1,2,3,4,6-Pentaacetyl-alpha-d-glucose and 1,2,3,4,6-pentaacetyl-beta-d-glucose	
09.260	Ethyl (2E,4Z)-decadienoate		
09.261	2-Phenylethyl caproate; 2-Phenylethyl hexanoate; Benzylcarbinyl caproate; Benzylcarbinyl hexanoate		
09.262	2-Phenylethyl caprylate; Benzylcarbinyl octanoate;		
09.263	Propionic acid, triglyceride; Tripropionin		1
09.264	Acetoxy butyrate; AMC butyrate;	1-Methyl-2-oxopropyl butanoate	
09.265			5
09.266			5
09.267	O-Hexylhexanolide		
09.268			
09.269	1,3,3-Trimethyl-2-norbornanyl acetate;	1,3,3-trimethyl-bicyclo[2.2.1]heptan-2-yl acetate	
09.270	β, gamma-Hexenyl n-butyrate; cis-3-Hexenyl-butanoate		5
09.271	3-Hexenyl caproate; cis-3-Hexenyl caproate		5
09.272	2-Pinen-10-ol formate	(6,6-Dimethylbicyclo[3.3.1]hept-2-en-2-yl)methyl formate	
09.273		2-Methylpropyl but-2(trans)-enoate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.274	01	627-90-7	Ethyl undecanoate	3492	10633	211-018-5
09.275	04	1576-77-8	Hept-3(trans)-enyl acetate	3493	10662	216-411-5
09.276	03	3913-80-2	Oct-2-enyl acetate	3516	11906	223-473-7
09.277	03	84642-60-4	Oct-2(trans)-enyl butyrate	3517	11907	283-437-1
09.278	07	15111-96-3	p-Mentha-1,8-dien-7-yl acetate	3561	10742	239-162-4
09.280	09	67715-81-5	Nonane-1,4-diyl diacetate	3579	11927	
09.281	05	2442-10-6	Oct-1-en-3-yl acetate	3582	11716	219-474-7
09.282	05	16491-54-6	Oct-1-en-3-yl butyrate	3612		240-555-8
09.283	01	7367-88-6	Ethyl dec-2-enoate	3641	10577	230-918-9
09.284	01	76649-16-6	Ethyl dec-4-enoate	3642	10578	278-509-4
09.285	01	7367-82-0	Ethyl oct-2(trans)-enoate	3643	10617	230-913-1
09.286	02	624-41-9	2-Methylbutyl acetate	3644	10762	210-843-8
09.287	01	28316-62-3	Propyl deca-2,4-dienoate	3648	10889	248-960-1
09.288	21	3572-06-3	4-(4-Acetoxyphenyl)butan-2-one	3652		222-682-0
09.289	07	36789-59-0	alpha-Campholene acetate	3657		253-212-2
09.290	01	69925-33-3	Ethyl octa-4,7-dienoate	3682		
09.291	04	61444-38-0	Hex-3-enyl hex-3-enoate	3689		262-797-3
09.292	01	33855-57-1	Hexyl 2-hexenoate	3692		
09.293	09	52789-73-8	1-Acetoxy-1-acetylcyclohexane	3701		258-186-6
09.294	23	17373-93-2	2-Methylbenzyl acetate	3702		241-412-2
09.298	01	13481-87-3	Methyl non-3-enoate	3710		236-786-9
09.299	01	7367-81-9	Methyl oct-2(trans)-enoate	3712	11800	230-912-6
09.300	01	689-89-4	Methyl hexa-2,4-dienoate	3714		211-712-8
09.301	25	59558-23-5	p-Tolyl octanoate	3733		261-803-1
09.302	07	1079-01-2	Myrtenyl acetate	3765	10887	214-088-5
09.303	03		Hept-2-enyl isovalerate		10664	
09.304	05		sec-Heptyl isovalerate		10806	
09.305	08	22030-19-9	beta-Ionyl acetate	3844	10702	
09.306	22		2-Methoxycinnamyl acetate		10752	
09.307	02		2-Methylbutyl dodecanoate		10766	
09.311	03	591-87-7	Allyl acetate		11730	209-734-8
09.312	03	7493-75-6	Allyl hexa-2,4-dienoate	2041	2182	231-336-8
09.313	23	56423-40-6	Benzyl 2-methylbutyrate		10523	260-169-3
09.314	23	65416-24-2	Benzyl crotonate			265-764-1
09.315	23	140-25-0	Benzyl dodecanoate			205-405-8

FL No	Synonyms	Systematic name	Comments
09.274	Ethyl undecylate, Ethyl hendecanoate		
09.275			
09.276	2-Octen-1-ol,acetate,(E)-		5
09.277	trans-2-Octenyl butyrate		
09.278	Perilla acetate; Perrilyl acetate; Perillyl acetate; Acetic acid, perillyl ester; Menthadien-7-carbinyl acetate;		
09.280	Nonanediol-1,4 acetate;		
09.281	Octenyl acetate; Amyl vinyl carbinyl acetate; 3-Acetoxyoctene; Amyl crotonyl acetate; Pentyl crotonyl acetate;	1-Vinylhexyl acetate	
09.282		1-Vinylhexyl butyrate	
09.283			5
09.284			5
09.285			5
09.286			
09.287			5
09.288			
09.289	1-Acetoxy-2-(2,2,3)-trimethyl-3-cyclopentenyl ethane;	2-(2,2,3-Trimethylcyclopent-3-enyl)ethyl acetate	5
09.290	Ethyl Z 4,7-octadienoate		
09.291	Z-3-Hexenyl Z-3-hexenoate		5
09.292	Hexyl E-2-hexenoate		
09.293	Methyl 1-acetoxycyclohexyl; 1-Acetylcyclohexyl acetate		
09.294			5
09.298			
09.299	Methyl E-2-octenoate		5
09.300	Methyl sorbate; Methyl 2,4-hexadienoate, Methyl E, E-2,4 Hexadienoate		5
09.301	o-Cresyl octanoate; p-Methylphenyl octanoate; p-Cresyl caprylate;	4-Methylphenyl octanoate	
09.302	2-Pinen-10-ol acetate	(6,6-Dimethylbicyclo[3.3.1]hept-2-en-2-yl)methyl acetate	
09.303		Hept-2-enyl 3-methylbutanoate	
09.304		1- Methylhexyl 3-methylbutanoate	
09.305	beta-Ionol acetate; 3-Buten-2-ol, 4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-, acetate	4-(2,2,6-Trimethylcyclohex-1-enyl)but-3-en-2-yl acetate	
09.306		3-(2-Methoxyphenyl)prop-2-enyl acetate	
09.307			
09.311			
09.312	Allyl Sorbate		
09.313			
09.314		Benzyl but-2(trans)-enoate	
09.315	Benzyl laurate		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.316	23	6938-45-0	Benzyl hexanoate		10521	230-068-9
09.317	23	2051-96-9	Benzyl lactate			218-136-6
09.318	23	10276-85-4	Benzyl octanoate			233-620-7
09.319	08	13109-70-1	Bornyl butyrate	3907		236-036-0
09.320	09	112-07-2	2-Butoxyethyl acetate			203-933-3
09.321	01	7785-64-0	Butyl 2-methylbut-2(cis)-enoate			232-084-1
09.322	01	6297-41-2	Butyl 2-methylvalerate			228-569-2
09.323	05	105-46-4	sec-Butyl acetate		10527	203-300-1
09.324	01	591-63-9	Butyl but-2-enoate			
09.325	05	819-97-6	sec-Butyl butyrate		10528	212-465-9
09.326	01	28369-24-6	Butyl deca-2,4-dienoate		10529	248-994-7
09.327	01	30673-36-0	Butyl decanoate		10530	250-280-5
09.328	05	589-40-2	sec-Butyl formate		10532	
09.329	01	13416-74-5	Butyl hex-2-enoate			
09.330	01	118869-62-8	Butyl hex-3-enoate			
09.331	01	111-06-8	Butyl hexadecanoate			203-829-8
09.332	05	820-00-8	sec-Butyl hexanoate		10533	
09.333	09	18449-60-0	sec-Butyl lactate			242-334-1
09.334	01	50623-57-9	Butyl nonanoate			256-661-2
09.335	01	57403-32-4	Butyl oct-2-enoate		10536	260-720-8
09.336	01	110-36-1	Butyl tetradecanoate			203-759-8
09.337	25	6380-28-5	Carvacryl acetate			228-963-4
09.338	08	32214-91-8	Caryophyllene alcohol acetate			250-960-1
09.339	22	61792-12-9	Cinnamyl 2-methylcrotonate			263-215-0
09.340	03	24717-85-9	Citronellyl 2-methylbut-2-enoate			246-426-2
09.341	04	10580-25-3	Citronellyl hexanoate			234-175-1
09.342	07	54993-30-5	Cyclogeranyl acetate			
09.343	08	1129-47-1	Cyclohexyl isobutyrate		10548	214-448-1
09.344	04	50816-18-7	Dec-9-enyl acetate			256-784-1
09.345	09	818-04-2	Di-isopentyl succinate		10555	212-448-6
09.346	30	1587-18-4	Dibutyl malate			
09.347	09	141-03-7	Dibutyl succinate			205-449-8
09.348	09	141-28-6	Diethyl adipate			205-477-0

FL No	Synonyms	Systematic name	Comments
09.316			
09.317		Benzyl 2-hydroxypropanoate	
09.318			
09.319	Bornyl butanoate; Butyric acid, 2-bornyl ester	1,7,7-Trimethyl-bicyclo[2.2.1]heptan-2-yl butanoate	
09.320			
09.321	Butyl angelate		
09.322	Butyl 2-methylpentanoate		
09.323	But-2-yl acetate	1-Methylpropyl acetate	
09.324			
09.325	But-2-yl butyrate	1-Methylpropyl butanoate	
09.326			5
09.327	Butyl caprate		
09.328	But-2-yl formate	1-Methylpropyl formate	
09.329			
09.330			
09.331	Butyl palmitate		
09.332	But-2-yl caproate; 2-Butyl hexanoate;	1-Methylpropyl hexanoate	
09.333		1-Methylpropyl 2-hydroxypropanoate	
09.334			
09.335			
09.336	Butyl myristate		
09.337		5-Isopropyl-2-methyl phenyl acetate	
09.338	Caryophyllene acetate	4,11,11-Trimethyl-8-methylene-bicyclo[7.2.0]undec-3-en-5-yl acetate	
09.339	Cinnamyl tiglate	3-Phenylprop-2-enyl 2-methylbut-2(trans)-enoate	
09.340		3,7-Dimethyloct-6-enyl 2-methylbutanoate	
09.341		3,7-Dimethyloct-6-enyl hexanoate	
09.342		(2,6,6-Trimethyl-1-cyclohexenyl)methyl acetate	
09.343		Cyclohexyl 2-methylpropanoate	
09.344	Rosalva acetate		
09.345	Di-isoamyl succinate; Di(3-methylbutyl) succinate	Di-(3-Methylbutyl)butanedioate	
09.346		Dibutyl 2-hydroxybutanedioate	
09.347		Dibutyl butanedioate	
09.348		Diethyl hexanedioate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.349	30	32074-56-9	Diethyl citrate			250-914-0
09.350	09	623-91-6	Diethyl fumarate			210-819-7
09.351	09	141-05-9	Diethyl maleate		10551	205-451-9
09.352	09	624-17-9	Diethyl nonanedioate		10549	210-833-3
09.353	09	95-92-1	Diethyl oxalate			202-464-1
09.354	09	818-38-2	Diethyl pentanedioate			212-451-2
09.355	08	20777-49-5	neo-Dihydrocarvyl acetate		10859	244-029-9
09.356	06	20487-40-5	1,1-Dimethylethyl propionate			
09.358	02	20780-49-8	3,7-Dimethyloctyl acetate		10899	244-034-6
09.359	09	111-15-9	2-Ethoxyethyl acetate		10565	203-839-2
09.360	09	2985-28-6	Ethyl 2-acetoxypropionate			
09.361	09	27372-03-8	Ethyl 2-hydroxy-3-methylbutyrate		10600	
09.362	23	60770-00-5	Ethyl 2-hydroxy-4-methylbenzoate			
09.363	23	7335-26-4	Ethyl 2-methoxybenzoate			230-843-1
09.364	15	2510-99-8	Ethyl 2-phenylpropionate			219-727-1
09.365	01	638-10-8	Ethyl 3-methylcrotonate		10610	211-319-1
09.366	09	121312-01-4	Ethyl 4-acetoxyoctanoate			
09.367	23	120-47-8	Ethyl 4-hydroxybenzoate			204-399-4
09.368	01	6849-18-9	Ethyl 4-methylpent-3-enoate		10615	
09.370	01	67233-91-4	Ethyl dec-9-enoate		10579	
09.371	01	78417-28-4	Ethyl deca-2,4,7-trienoate	3832	10576	
09.372	01	28290-90-6	Ethyl dodec-2-enoate		10584	
09.373	01	32659-21-5	Ethyl geranate			251-144-8
09.374	01	54340-72-6	Ethyl hept-2-enoate			
09.375	01	97-63-2	Ethyl methacrylate			202-597-5
09.376	01	26553-47-9	Ethyl oct-3(trans)-enoate			247-799-4
09.377	01	1117-65-3	Ethyl oct-3-enoate		10618	
09.378	01	78989-37-4	Ethyl oct-4(trans)-enoate			279-035-0
09.379	01	2445-93-4	Ethyl pent-2-enoate		10623	219-500-7
09.380	01	41114-00-5	Ethyl pentadecanoate		10622	255-223-8
09.381	02	103-09-3	2-Ethylhexyl acetate			203-079-1
09.382	03	68705-63-5	Geranyl 2-methylbutyrate			272-100-4
09.383	03	7785-33-3	Geranyl 2-methylcrotonate		11829	232-078-9
09.384	03	51532-26-4	Geranyl octanoate			257-256-3
09.385	03	16939-73-4	Hept-2-enyl acetate		10661	241-002-3
09.386	05	94088-33-2	sec-Hept-4(cis)-enyl acetate			302-032-3
09.387	01	50862-12-9	Heptyl 2-methylbutyrate		10668	256-811-7
09.388	05	5921-82-4	sec-Heptyl acetate		10802	227-647-3

FL No	Synonyms	Systematic name	Comments
09.349			
09.350		Diethyl but-2(trans)-enedioate	
09.351	2-Butenedioic acid diethyl ester; Ethyl maleate	Diethyl but-2(cis)-enedioate	
09.352	Diethyl azelate		
09.353		Diethyl ethanedioate	
09.354			
09.355		p-Menth-8(9)-en-2-yl acetate	
09.356	tertButyl propionate		
09.358	Tetrahydrogeranyl acetate		
09.359	Ethylene glycol monoethyl ether acetate		
09.360	Ethyl acetylactate		
09.361			
09.362			
09.363			
09.364			
09.365	Ethyl senecioate	Ethyl 3-methylbut-2(trans)-enoate	
09.366			
09.367			4
09.368			
09.370			
09.371	Ethyl deca-2,4,7-trienoate; 2,4,7-Decatrienoic acid, ethyl ester		
09.372			
09.373		Ethyl 3,7-dimethylocta-2(trans),6-dienoate	
09.374			
09.375		Ethyl 2-methylprop-2-enoate	
09.376			
09.377			
09.378			
09.379			
09.380			
09.381	beta-Ethylhexyl acetate; 2-ethylhexanyl acetate		
09.382		3,7-Dimethyl-2(trans),6-octadienyl 2-methylbutanoate	
09.383	Geranyl tiglate	3,7-Dimethyl-2(trans),6-octadienyl 2-methylbut-2(trans)-enoate	
09.384	Geranyl caprylate	3,7-Dimethylocta-2(trans),6-dienyl octanoate	
09.385			5
09.386		1-Methylhex-3(cis)-enyl acetate	
09.387			
09.388		1-Methylhexyl acetate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.390	01	6976-72-3	Heptyl hexanoate		10666	230-239-8
09.391	05	6624-58-4	sec-Heptyl hexanoate		10805	229-582-6
09.392	01	56423-43-9	Heptyl isovalerate		10667	260-170-9
09.393	01	5451-80-9	Heptyl valerate		10672	226-686-3
09.394	03	2497-18-9	Hex-2(trans)-enyl acetate	2564	643	219-680-7
09.395	03	53398-80-4	Hex-2(trans)-enyl propionate	3932	11830	258-513-2
09.396	03	53398-83-7	Hex-2-enyl butyrate	3926		258-515-3
09.397	03	53398-78-0	Hex-2-enyl formate	3927	11858	258-512-7
09.398	03	53398-86-0	Hex-2-enyl hexanoate			258-519-5
09.399	03	35154-45-1	Hex-2-enyl isovalerate	3930		252-404-3
09.400	15	68133-78-8	Hex-2-enyl phenylacetate			268-705-8
09.401	09	2308-18-1	Isopentyl acetoacetate	3551	227	218-991-5
09.402	09	141-97-9	Ethyl acetoacetate	2415	240	205-516-1
09.403	09	591-60-6	Butyl acetoacetate	2176	241	209-722-2
09.404	09	7779-75-1	Isobutyl acetoacetate	2177	242	231-937-5
09.405	09	10032-00-5	Geranyl acetoacetate	2510	243	233-101-5
09.406	23	5396-89-4	Benzyl 3-oxobutyrate	2136	244	226-416-4
09.407	15	42078-65-9	2-Phenethyl 3-methylcrotonate	2869	246	255-649-4
09.408	02	7779-81-9	Isobutyl 2-methylbut-2(cis)-enoate	2180	247	231-941-7
09.409	01	7452-79-1	Ethyl 2-methylbutyrate	2443	265	231-225-4
09.410	03	7493-69-8	Allyl 2-ethylbutyrate	2029	281	231-332-6
09.411	03	7493-65-4	Allyl cyclohexanebutyrate	2024	283	

FL No	Synonyms	Systematic name	Comments
09.390			
09.391		1-Methylhexyl hexanoate	
09.392		Heptyl 3-methylbutanoate	
09.393	Heptyl pentanoate		
09.394	trans-2-Hexenyl acetate; 2-Hexen-1-yl acetate		5
09.395	2-Hexenyl propanoate; (E)-Hex-2-enyl propionate; trans-2-Hexenyl propionate		
09.396			5
09.397	(E)-Hex-2-enyl formate; trans-2-Hexenyl formate		5
09.398			5
09.399		Hex-2-enyl 3-methylbutanoate	5
09.400			5
09.401	3-Methylbutyl acetoacetate; Pentyl 3-Oxobutanoate; Isoamyl Beta-ketobutyrate;	3-Methylbutyl 3-oxobutanoate	
09.402	Ethyl acetylacetate; Ethyl beta-Ketobutyrate; Acetoacetic ester	Ethyl 3-oxobutanoate	
09.403	Butyl 3-ketobutanoate; Butyl 3-Ketobutyrate	Butyl 3-oxobutanoate	
09.404	Isobutyl-beta-ketobutyrate; Isobutyl-3-oxobutanoate; 2-Methyl-1-propyl acetoacetate; Isobutyl 3-ketobutanoate;	2-Methylpropyl 3-oxobutanoate	
09.405	Geranyl 3-oxobutanoate; Geranyl beta-ketobutyrate; trans-3,7-Dimethyl-2,6-octadien-1-yl acetoacetate;	3,7-Dimethylocta-2(trans),6-dienyl 3-oxobutanoate	
09.406	Benzyl acetylacetate; Benzyl 3-Oxobutanoate; Benzyl β -Ketobutyrate		
09.407	2-Phenylethyl 3-methyl-2-butenolate; 2-Phenethyl senecioate; Phenethyl 3,4-dimethylacrylate	2-Phenylethyl 3-methylbut-2(trans)-enoate	
09.408	Isobutyl angelate; Butyl iso angelate, Butyl iso cis-2-methyl-2-butenolate	2-Methylpropyl 2-methylbut-2(cis)-enoate	5
09.409			
09.410	2-Propenyl 2-ethylbutanoate; 2-Propenyl 2-ethylbutyrate;		
09.411	Allyl 4-cyclohexylbutyrate; 2-Propen-1-yl cyclohexanebutyrate; Allyl hexahydrophenylbutyrate; Allyl cyclohexylbutyrate		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.412	01	547-63-7	Methyl isobutyrate	2694	287	208-929-5
09.413	01	97-62-1	Ethyl isobutyrate	2428	288	202-595-4
09.414	01	644-49-5	Propyl isobutyrate	2936	289	211-417-4
09.415	05	617-50-5	Isopropyl isobutyrate	2937	290	210-517-5
09.416	01	97-87-0	Butyl isobutyrate	2188	291	202-614-6
09.417	02	97-85-8	Isobutyl isobutyrate	2189	292	202-612-5
09.418	01	2445-72-9	Pentyl isobutyrate		293	219-494-6
09.419	02	2050-01-3	Isopentyl isobutyrate	3507	294	218-078-1
09.420	01	2349-13-5	Heptyl isobutyrate	2550	295	219-076-3
09.421	04	97-89-2	Citronellyl isobutyrate	2313	296	202-616-7
09.423	06	78-35-3	Linalyl isobutyrate	2640	298	201-108-2
09.424	03	2345-24-6	Neryl isobutyrate	2775	299	219-061-1
09.425	06	7774-65-4	Terpinyl 2-methylpropionate	3050	300	231-878-5
09.426	23	103-28-6	Benzyl isobutyrate	2141	301	203-095-9
09.427	15	103-48-0	Phenethyl isobutyrate	2862	302	203-116-1
09.428	22	103-58-2	3-Phenylpropyl isobutyrate	2893	303	203-125-0
09.429	25	103-93-5	p-Tolyl isobutyrate	3075	304	203-159-6
09.430	23	5461-08-5	Piperonyl isobutyrate	2913	305	226-745-3

FL No	Synonyms	Systematic name	Comments
09.412	Methyl dimethylacetate, Methyl-2-methylpropionate	Methyl 2-methylpropanoate	
09.413	Ethyl isobutanoate; Ethyl 2-methylpropanoate, Propanoic acid, 2-methyl-, ethyl ester	Ethyl-2-methylpropanoate	
09.414		Propyl 2-methylpropanoate	
09.415	Propyl iso isobutyrate, Isopropyl 2-methylpropanoate, Propyl iso 2-methylpropanoate	Isopropyl 2-methylpropanoate	
09.416	Butyl-2-methylpropionate; n-Butyl 2-methylpropanoate	Isobutyl 2-methylpropanoate	
09.417	Isobutyl 2-methylpropionate; Butyl iso 2-Methylpropanoate, 2-Methyl-1-propyl 2-methylpropanoate; Isobutyl 2-methylpropanoate	2-Methylpropyl 2-methylpropanoate	
09.418	Amyl isobutyrate; Amyl isobutyrate	Pentyl 2-methylpropanoate	
09.419	Isopentyl-2-methyl propanoate	3-Methylbutyl 2-methylpropanoate	
09.420	Heptyl 2-methylpropanoate	Heptyl 2-methylpropanoate	
09.421	Citronellyl 2-methylpropionate; 3,7-Dimethyl-6-octen-1-yl isobutyrate; 3,7-Dimethyl-6-octen-1-yl 2-methylpropanoate	3,7-Dimethyloct-6-enyl 2-methylpropanoate	
09.423	Linalyl 2-methylpropionate; 3,7-Dimethyl-1,6-octadien-3-yl isobutyrate, Linalool isobutyrate	1,5-Dimethyl-1-vinylhex-4-enyl 2-methylpropanoate	
09.424	2-cis-3,7-Dimethyl-2,6-octadien-1-yl isobutyrate	3,7-Dimethyl-2(cis), 6-octadienyl 2-methylpropanoate	
09.425	Terpinyl isobutyrate; 1-Methyl-1-(4-methylcyclohex-3-enyl)ethyl 2-methylpropionate	p-Menth-1-en-8-yl isobutyrate	
09.426	Benzyl 2-methylpropanoate;	Benzyl-2-methylpropanoate	
09.427	2-Phenethyl isobutyrate; 2-Phenylethyl isobutyrate; Benzylcarbonyl 2-methylpropanoate; Phenethyl 2-methylpropanoate;	2-Phenylethyl 2-methylpropanoate	
09.428	Hydrocinnamyl isobutyrate; Hydrocinnamyl 2-methylpropanoate	3- Phenylpropyl 2-methylpropanoate	
09.429	p-Cresyl isobutyrate; p-Methylphenyl 2-methylpropanoate; p-Methylphenyl isobutyrate; p-Tolyl 2-methylpropanoate;	4-Methylphenyl 2-methylpropanoate	
09.430	Piperonyl 2-methylpropionate; 3,4-Methylenedioxybenzyl-2-methylpropanoate; Heliotropyl-2-methylpropanoate;	3,4-Methylenedioxybenzyl 2-methylpropanoate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.431	03	2345-26-8	Geranyl isobutyrate	2513	306	219-062-7
09.432	01	2412-80-8	Methyl 4-methylvalerate	2721	322	219-320-9
09.433	09	97-64-3	Ethyl lactate	2440	371	202-598-0
09.434	09	138-22-7	Butyl lactate	2205	372	205-316-4
09.435	09	539-88-8	Ethyl 4-oxovalerate	2442	373	208-728-2
09.436	09	2052-15-5	Butyl 4-oxovalerate	2207	374	218-143-4
09.439	30	7554-12-3	Diethyl malate	2374	382	231-444-5
09.441	09	17373-84-1	Butyl ethyl malonate	2195	384	
09.442	09	617-35-6	Ethyl pyruvate	2457	430	210-511-2
09.443	09	7779-72-8	Isopentyl pyruvate	2083	431	231-934-9
09.444	09	123-25-1	Diethyl succinate	2377	438	204-612-0
09.445	09	106-65-0	Dimethyl succinate	2396	439	203-419-9
09.446	30	87-91-2	Diethyl tartrate	2378	440	201-783-3
09.447	01	108-64-5	Ethyl isovalerate	2463	442	203-602-3
09.448	01	557-00-6	Propyl isovalerate	2960	443	209-148-2
09.449	01	109-19-3	Butyl isovalerate	2218	444	203-654-7
09.450	05	32665-23-9	Isopropyl isovalerate	2961	445	251-145-3
09.451	01	7786-58-5	Octyl isovalerate	2814	446	232-100-7

FL No	Synonyms	Systematic name	Comments
09.431	Geranyl 2-methylpropionate; trans-3,7-Dimethyl-2,6-octadien-1-yl isobutyrate;	3,7-Dimethylocta-2(trans), 6-dienyl 2-methylpropanoate	
09.432	Methyl 4-methylpentanoate; Methyl isocaproate, Methyl isobutylacetate		
09.433	Ethyl alpha-hydroxypropionate;	Ethyl 2-hydroxypropanoate	
09.434	Butyl alpha-hydroxypropionate; Butyl hydroxypropanoate;	Butyl 2-hydroxypropanoate	
09.435	Ethyl laevulinate; Ethyl 4-ketovalerate; Ethyl acetylpropanoate; Ethyl laevulate; Ethyl levulinate;		
09.436	Butyl laevulinate; Butyl 4-ketovalerate; Butyl 4-oxopentanoate; Butyl acetylpropanoate;		
09.439	Diethylhydroxysuccinate; Ethyl malate	Diethyl 2-hydroxybutanedioate	
09.441	Ethyl butyl maloate;	Butyl ethyl propanedioate	
09.442	Ethyl acetylformate; Ethyl alpha-Ketopropionate; Ethyl pyrroacemate	Ethyl 2-oxopropanoate	
09.443	Isoamyl 2-oxopropanoate	3-Methylbutyl 2-oxopropanoate	
09.444	Diethyl butanedionate; Diethyl ethanedicarboxylate; Ethyl succinate;	Diethyl butanedioate	
09.445	Dimethyl butanedionate; Methyl succinate;	Dimethyl butanedioate	
09.446	Diethyl 2,3-dihydroxybutanedioate; Ethyl tartrate; Diethyl 2,3-dihydroxysuccinate;	Diethyl 2,3-dihydroxybutanedioate	
09.447	Ethyl β-methylbutyrate; Ethyl isopentanoate	Ethyl 3-methylbutanoate	
09.448	Propyl isovalerianate, Propyl 3-methylbutanoate, Propyl isopentanoate, Propyl 3-methylbutyrate		
09.449	Butyl isovalerianate; Butyl isopentanoate	Butyl-3-methylbutanoate	
09.450	Propyl iso isovalerate; Isopropyl isovalerianate; Isopropyl isopentanoate	Isopropyl 3-methylbutanoate	
09.451	Octyl isovalerianate; Octyl isopentanoate; Octyl 3-methylbutyrate	Octyl 3-methylbutanoate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.452	01	7786-47-2	Nonyl isovalerate	2791	447	232-098-8
09.453	03	109-20-6	Geranyl isovalerate	2518	448	203-655-2
09.454	06	1118-27-0	Linalyl isovalerate	2646	449	214-259-4
09.455	08	16409-46-4	Menthyl isovalerate	2669	450	240-460-1
09.456	08	76-50-6	Bornyl isovalerate	2165	451	200-966-5
09.457	08	7779-73-9	Isobornyl isovalerate	2166	452	231-935-4
09.458	23	103-38-8	Benzyl isovalerate	2152	453	203-106-7
09.459	22	140-27-2	Cinnamyl isovalerate	2302	454	205-407-9
09.460	04	68922-10-1	Citronellyl isovalerate		455	272-982-0
09.461	06	1142-85-4	Terpinyl isovalerate	3054	456	
09.462	01	556-24-1	Methyl isovalerate	2753	457	209-117-3
09.463	02	659-70-1	3-Methylbutyl 3-methylbutyrate	2085	458	211-536-1
09.464	08	7774-44-9	Cyclohexyl isovalerate	2355	459	231-874-3
09.465	04	7778-96-3	Rhodinyl isovalerate	2987	460	231-919-7
09.466	15	140-26-1	Phenethyl isovalerate	2871	461	205-406-3

FL No	Synonyms	Systematic name	Comments
09.452	Nonyl isovalerianate; Nonyl isopentanoate	Nonyl 3-methylbutanoate	
09.453	Geranyl 3-methylbutyrate; trans-3,7-Dimethyl-2,6-octadien-1-yl isopentanoate;	3,7-Dimethylocta-2(trans), 6-dienyl 3-methylbutanoate	
09.454	Linalyl 3-methylbutyrate; 3,7-Dimethyl-1,6-octadien-3-yl isovalerate, Linalyl isopentanoate, Linalyl isovalerianate	1,5-Dimethyl-1-vinylhex-4-enyl 3-methylbutanoate	
09.455	p-Menth-3-yl isovalerate; Menthyl isovalerianate; 1-Isopropyl-4-methylcyclohex-2-yl 3-methylbutanoate;	2-Isopropyl-5-methylcyclohexanyl 3-methylbutanoate	
09.456	Bornyl 3-methylbutyrate; Bornyl isovalerianate; Bornyl isopentanoate;	1,7,7-Trimethyl-bicyclo[2.2.1]hept-2-yl 3-methylbutanoate	
09.457	Isobornyl 3-methylbutyrate; Isobornyl isovalerianate; Bornyl iso isovalerate; Bornyl iso isopentanoate;	1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl 3-methylbutanoate	
09.458	Benzyl isovalerianate; Benzyl isopentanoate	Benzyl 3-methyl butanoate	
09.459	Cinnamyl-3-methylbutyrate; Cinnamyl isovalerianate; 3-Phenylallyl isovalerate; 3-Phenyl-2-propen-1-yl 3-methylbutanoate;	3-Phenylprop-2-enyl 3-methylbutanoate	
09.460	Citronellyl isopentanoate	3,7-Dimethyloct-6-enyl 3-methylbutanoate	
09.461	p-Menth-1-en-8-yl isovalerate; Terpinyl isopentanoate; p-Menth-1-en-8-yl 3-methylbutyrate;	p-Menth-1-en-8-yl 3-methylbutanoate	
09.462	Methyl iso valerianate, Methyl β-methyl butyrate	Methyl 3-methylbutanoate	
09.463	Isoamyl isopentanoate; Isopentyl isopentanoate; iso amyl β-methyl butyrate		
09.464	Cyclohexyl isovalerianate; Cyclohexyl isopentanoate	Cyclohexyl-3-methylbutanoate	
09.465	alpha-Citronellyl isopentanoate	3,7-Dimethyloct-7-enyl 3-methylbutanoate	5
09.466	Phenylethyl isopentanoate; 2-Phenylethyl isovalerate; Benzylcarbiny 3-methylbutanoate;	2-Phenylethyl 3-methylbutanoate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.467	22	5452-07-3	3-Phenylpropyl isovalerate	2899	462	226-692-6
09.468	22	7493-80-3	alpha-Pentylcinnamyl isovalerate	2067	463	
09.469	03	7493-68-7	Allyl cyclohexanevalerate	2027	474	
09.470	22	103-59-3	Cinnamyl isobutyrate	2297	496	203-126-6
09.471	03	3915-83-1	Neryl isovalerate	2778	508	223-478-4
09.472	02	589-59-3	Isobutyl isovalerate	3369	568	209-653-8
09.473	01	109-15-9	Octyl isobutyrate	2808	593	203-651-0
09.474	09	109-43-3	Dibutyl sebacate	2373	622	203-672-5
09.475	09	110-40-7	Diethyl sebacate	2376	623	203-764-5
09.476	30	94-02-0	Ethyl 3-phenyl-3-oxopropionate	2423	627	202-295-3
09.478	01	2349-07-7	Hexyl isobutyrate	3172	646	219-075-8
09.480	25	36438-54-7	o-Tolyl isobutyrate	3753	681	
09.481	01	105-58-8	Diethyl carbonate		710	203-311-1
09.482	03	4728-82-9	Allyl cyclohexaneacetate	2023	2070	225-230-0
09.483	01	868-57-5	Methyl 2-methylbutyrate	2719	2085	212-778-0
09.484	06	10031-71-7	1,1-Dimethyl-3-phenylpropyl isobutyrate	2736	2086	233-092-8
09.485	22	65813-53-8	2-Phenylpropyl isobutyrate	2892	2087	265-931-9

FL No	Synonyms	Systematic name	Comments
09.467	Hydrocinnamyl isovalerate; 3-Phenylpropyl isovaleriate; Hydrocinnamyl 3-methylbutanoate; 3-Phenylpropyl isopentanoate;	3- Phenylpropyl 3-methylbutanoate	
09.468	alpha-Amylcinnamyl 3-methylbutyrate; alpha-n-Amyl-beta-phenylacryl isovalerate; Floxin isovalerate;	2-Pentyl-3-phenylprop-2-enyl 3-methylbutanoate	
09.469	Allyl 5-cyclohexylpentanoate; Allyl cyclohexanepentanoate; 2-Propen-1-yl cyclohexanevalerate;		
09.470	Cinnamyl-2-methylpropionate; Cinnamyl 2-methylpropanoate; 3-Phenyl-2-propen-1-yl isobutyrate;	3-Phenylprop-2-enyl 2-methylpropanoate	
09.471	Neryl beta-methylbutyrate; Neryl 3-methylbutyrate; Neryl isovalerianate; cis-3,7-Dimethyl-2,6-octadien-1-yl isopentanoate	3,7-Dimethyl-2(cis), 6-octadienyl 3-methylbutanoate	
09.472		2-Methylpropyl 3-methylbutanoate	
09.473		Octyl 2-methylpropanoate	
09.474	Butyl sebacate; Dibutyl decanedioate; Dibutyl 1,8-octanedicarboxylate;	Dibutyl decane-1,10-dioate	
09.475	Diethyl 1,8-octanedicarboxylate; Ethyl sebacate;	Diethyl decanedioate	
09.476	Ethyl benzoylacetate; Ethyl 3-phenyl-3-oxopropanoate; Ethyl beta-Keto-beta-phenylpropionate		
09.478		Hexyl 2-methylpropanoate	
09.480		2-Methylphenyl 2-methylpropanoate	
09.481			
09.482	Allyl cyclohexylacetate; 2-Propen-1-yl cyclohexaneacetate;		
09.483	Methyl methylethylacetate, Methyl-2-methylbutanoate		
09.484	Dimethyl phenethyl carbinyl isobutyrate; 2-Methyl-4-phenyl-2-butyl isobutyrate; 2-Methyl-4-phenyl-2-butyl-2-methylpropanoate	1,1-Dimethyl-3-phenylpropyl 2-methylpropanoate	
09.485	2-Methyl-2-phenylethyl 2-methylpropanoate; 2-Alpha-Phenylpropyl alcohol, isobutyric ester; Hydratropyl isobutyrate;	2-Phenylpropyl 2-methylpropanoate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.486	21	7775-39-5	1-Phenethyl isobutyrate	2687	2088	231-894-2
09.487	15	103-60-6	2-Phenoxyethyl isobutyrate	2873	2089	203-127-1
09.488	01	10094-36-7	Ethyl cyclohexanepropionate	2431	2095	233-222-3
09.489	03	2835-39-4	Allyl isovalerate	2045	2098	220-609-7
09.490	09	105-53-3	Diethyl malonate	2375	2106	203-305-9
09.491	09	7492-70-8	Butyl-O-butyryllactate	2190	2107	231-326-3
09.492	03	7493-66-5	Allyl cyclohexanhexanoate	2025	2180	
09.493	03	7493-71-2	Allyl 2-methylcrotonate	2043	2183	231-333-1
09.494	23	37526-88-8	Benzyl 2-methylcrotonate	3330	2184	253-544-8
09.495	01	5837-78-5	Ethyl 2-methylcrotonate	2460	2185	227-425-6
09.496	15	55719-85-2	Phenethyl 2-methylcrotonate	2870	2186	259-774-5
09.497	09	94022-04-5	Butyl O-butyrylglycollate		2188	301-496-4
09.498	03	2705-87-5	Allyl cyclohexanepropionate	2026	2223	220-292-5
09.499	01	25415-62-7	Pentyl isovalerate		2224	246-954-3
09.501	21	620-79-1	Ethyl 2-acetyl-3-phenylpropionate	2416	2241	210-651-4
09.502	09	71662-27-6	Ethyl butyryl lactate		2242	275-793-1

FL No	Synonyms	Systematic name	Comments
09.486	alpha-Methylbenzyl isobutyrate; styrallyl isobutyrate; Methyl phenyl carbinyl butyrate; 1-Phenyl-1-ethyl 2-Methylpropanoate; Methyl phenylcarbinyl isobutyrate	1-(2-Phenylethyl) 2-methylpropanoate	
09.487	2-Phenoxyethyl 2-methylpropanoate; Ethylene glycol monophenyl ether, isobutyrate; Phenylcellosolve isobutyrate	2-Phenoxyethyl-2-methylpropanoate	
09.488	Ethyl 3-cyclohexylpropionate; Ethyl hexahydrophenylpropionate		
09.489	2-Propenyl isopentanoate; Allyl isopentanoate; Allyl isovalerianate; 2-Propenyl 3-methylbutanoate;	Allyl 3-methylbutanoate	
09.490	Ethyl malonate; Malonic ester; Ethyl propanedioate; Ethyl methanedicarboxylate;	Diethyl propanedioate	
09.491	Butyl butyrolactate; Butyl-alpha-butyroxy propionate; Butyl 2-(propylcarboxy) propanoate;	Butyl 2-butanoyloxypropanoate	
09.492	Allyl 3-cyclohexylhexanoate; Allyl hexahydrophenylhexanoate; Allyl cyclohexanecaproate;		
09.493	Allyl tiglate; Allyl-trans-2,3-dimethylacrylate; Allyl-trans-2-methyl-2-butenolate; Allyl-2-methyl-crotonate;	Allyl 2-methylbut-2(trans)-enoate	
09.494	Benzyl tiglate; Benzyl trans-2,3-dimethyl acrylate; Benzyl trans-2-methyl crotonate	Benzyl 2-methylbut-2(trans)-enoate	
09.495	Ethyl tiglate; Ethyl trans-2,3-dimethyl acrylate, Ethyl (trans)-2-Methylcrotonate, Tiglic acid ethyl ester	Ethyl 2-methylbut-2(trans)-enoate	
09.496	Phenethyl tiglate; 2-Phenylethyl tiglate; 2-Phenylethyl trans-2,3-dimethylacrylate; 2-Phenylethyl trans-2-methylbutenoate	2-Phenylethyl 2-methylbut-2(trans)-enoate	
09.497			
09.498	Allyl 3-cyclohexylpropionate; 2-Propen-1-yl cyclohexanepropionate; Allyl hexahydrophenylpropionate		
09.499	Amyl isopentanoate; Pentyl 3-methylbutyrate; Pentyl-3-methyl butanoate, n-amyl isovalerianate	Pentyl 3-methylbutanoate	
09.501	Ethyl 2-benzylacetoacetate; Ethyl 2-acetyldihydrocinamate; Ethyl alpha-acetylhydrocinamate		
09.502	Ethyl O-butyryllactate	Ethyl 2-(butoxycarbonyl)propanoate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.505	04	10032-11-8	Hex-3-enyl isovalerate	3498	2344	233-104-1
09.506	04	10094-41-4	Hex-3-enyl 2-methylbutyrate	3497	2345	233-224-4
09.507	01	10032-15-2	Hexyl 2-methylbutyrate	3499	4132	233-106-2
09.508	23	7492-69-5	Benzyl 2,3-dimethylcrotonate	2143	11868	
09.509	06	7774-60-9	1-Methyl-1-phenethyl isobutyrate	2388	11828	231-876-4
09.510	30	1321-30-8	Ethyl aconitate	2417	11845	
09.511	30	77-90-7	Tributyl acetyl citrate	3080		201-067-0
09.512	30	77-93-0	Triethyl citrate	3083	11762	201-070-7
09.513	05	1733-25-1	Isopropyl 2-methylcrotonate	3229	10733	217-067-9
09.514	30	13246-52-1	Ethyl 2,4-dioxohexanoate	3278	11903	236-228-4
09.515	03	73019-14-4	Geranyl 2-ethylbutyrate	3339	11667	277-234-7
09.516	02	2445-78-5	2-Methylbutyl 2-methylbutyrate	3359	10773	219-497-2
09.517	01	2270-60-2	Methyl citronellate	3361	10781	218-874-9
09.518	25	55066-56-3	4-Methylphenyl isovalerate	3387	10545	259-465-5
09.519	01	15706-73-7	Butyl 2-methylbutyrate	3393	10534	239-798-2
09.520	30	24851-98-7	Methyl 3-oxo-2-pentyl-1-cyclopentylacetate	3408	10785	246-495-9
09.521	30	39924-52-2	Methyl 3-oxo-2-pent-2-enyl-1-cyclopentylacetate	3410	10821	214-918-6
09.522	09	5405-41-4	Ethyl 3-hydroxybutyrate	3428	10596	226-456-2
09.523	01	6624-71-1	Dodecyl isobutyrate	3452	10563	229-583-1
09.524	01	1617-23-8	Ethyl 2-methylpent-3-enoate	3456	10612	216-572-1
09.525	12	65416-14-0	Maltyl isobutyrate	3462	10739	265-755-2
09.526	01	39255-32-8	Ethyl 2-methylvalerate	3488	10616	254-384-1

FL No	Synonyms	Systematic name	Comments
09.505	3-Hexenyl isopentanoate; 3-Hexenyl isovalerate	Hex-3-enyl 3-methylbutanoate	
09.506	3-Hexenyl 2-methylbutyrate; cis-3-Hexenyl-a-methylbutyrate; Hex-3-enyl 2-methylbutanoate;		
09.507			
09.508	Benzyl methyltiglate; Benzyl 2,3-dimethyl-2-butenolate;	Benzyl-2,3-dimethylbut-2(trans)-enoate	
09.509	Dimethyl phenyl carbonyl isobutyrate; Phenylpropan-2-yl 2-methylpropionate; alpha, alpha-Dimethylbenzyl isobutyrate; 2-Phenylpropan-2-yl 2-methylpropanoate	1-Methyl-1-(2-phenylethyl) 2-methylpropanoate	
09.510	Triethyl aconitate; Ethyl 1-propene-1,2,3-tricarboxylate; Ethyl 2-carboxylglutaconate;	Triethyl propene-1,2,3-tricarboxylate	
09.511	Acetyl tributylcitrate;	Tributyl 2-acetoxy-1,2,3-propanetricarboxylate	
09.512	Ethyl citrate	Triethyl 2-hydroxy-1,2,3-propanetricarboxylate	1
09.513	Propyl iso tiglate, Isopropyl tiglate; Propyl iso alpha-Methylcrotonate, Isopropyl alpha-Methylcrotonate	Isopropyl 2-methylbut-2(trans)-enoate	
09.514	Ethyl propionylpyruvate; Ethyl-2,4-diketocaproate; ethyl propionyl pyruvate;		
09.515		3,7-Dimethyl-2(trans),6-octadienyl 2-ethylbutanoate	
09.516	2-Methylbutyl 2-methylbutanoate		
09.517	Methyl-3,7-dimethyl-oct-6-enoate	Methyl 3,7-dimethyloct-6-enoate	
09.518	p-Cresyl isopentanoate; 4-Methylphenyl 3-methylbutyrate; p-Tolyl isovalerate; p-Tolyl-3-methyl butyrate	4-Methylphenyl 3-methylbutanoate	
09.519			
09.520	Hedione; Methyl dihydrojasmonate; Methyl 2-pentyl-3-oxo-1-cyclopentyl-acetate; Jasmonic acid, (E)-dihydro-, methyl ester		
09.521	Methyl jasmonate; 2-Pentenyl cyclopentanone-3-acetic acid, methyl ester; Methyl(2-pent-2-enyl-3-oxo-1-cyclopentyl)acetate		
09.522	Ethyl 3-hydroxybutanoate; Ethyl Beta-hydroxybutyrate		
09.523	Dodecyl 2-methyl-propanoate; Lauryl isobutyrate; Lauryl 2-methylpropionate	Dodecyl 2-methylpropanoate	
09.524			
09.525	2-Methyl-4-pyron-3-yl 2-methylpropanoate; Maltyl 2-methylpropanoate;	2-Methyl-4H-pyran-4-one-3-yl 2-methylpropanoate	
09.526	Ethyl 2-methylpentanoate;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.527	01	53399-81-8	Ethyl 2-methylpent-4-enoate	3489	10613	258-520-0
09.528	04		trans-3-Heptenyl isobutyrate	3494	10663	
09.529	01	10032-13-0	Hexyl isovalerate	3500	10692	233-105-7
09.530	02	27625-35-0	Isopentyl 2-methylbutyrate	3505	10721	248-581-1
09.531	02	2445-77-4	2-Methylbutyl isovalerate	3506	10772	219-496-7
09.532	09	21188-58-9	Methyl 3-hydroxyhexanoate	3508	10812	244-261-0
09.533	09	105-95-3	Ethyl brassylate	3543	10571	203-347-8
09.534	01	3289-28-9	Ethyl cyclohexanecarboxylate	3544	11916	221-945-7
09.535	09	2305-25-1	Ethyl 3-hydroxyhexanoate	3545	11764	218-973-7
09.536	01	4630-82-4	Methyl cyclohexanecarboxylate	3568	11920	225-050-2
09.537	01	29811-50-5	Octyl 2-methylbutyrate	3604	10866	249-872-6
09.538	15	24817-51-4	Phenethyl 2-methylbutyrate	3632	10883	246-476-5
09.539	05	94133-92-3	Oct-3-yl 2-methylcrotonate	3676		302-757-5
09.540	01	60523-21-9	Ethyl 2-methylpenta-3,4-dienoate	3678		262-278-1
09.541	01	5870-68-8	Ethyl 3-methylvalerate	3679		227-524-4
09.542	09	3249-68-1	Ethyl 3-oxohexanoate	3683		221-835-9
09.543	30	26446-31-1	Glyceryl 5-hydroxydecanoate	3685	10648	247-699-0
09.544	30	26446-32-2	Glyceryl 5-hydroxydodecanoate	3686	10649	247-700-4
09.545	09	61931-81-5	Hex-3-enyl lactate	3690	10681	263-337-4
09.546	01	58625-95-9	Hexyl-2-methylpent-(3 and 4)-enoate	3693		
09.547	05	66576-71-4	Isopropyl 2-methylbutyrate	3699		266-411-4
09.548	09	40348-72-9	Methyl 2-hydroxy-4-methylvalerate	3706		254-883-4
09.549	01	2177-77-7	Methyl 2-methylvalerate	3707		218-543-9
09.550	09	3682-42-6	Methyl 2-oxo-3-methylvalerate	3713		

FL No	Synonyms	Systematic name	Comments
09.527			
09.528	Hept-3(trans)-enyl isobutyrate	Hept-3(trans)-enyl 2-methylpropanoate	
09.529	Hexyl isopentanoate; Hexyl isovalerianate	Hexyl 3-methylbutanoate	
09.530	Isoamyl 2-methylbutanoate; Isopentyl 2-methylbutanoate; Iso-Amyl 2-methylbutanoate	3-Methylbutyl 2-methylbutanoate	
09.531	2-Methylbutyl isopentanoate	2-Methylbutyl 3-methylbutanoate	
09.532	Methyl 3-hydroxycaproate; Methyl beta-hydroxycaproate; Methyl beta-hydroxyhexanoate		
09.533	Ethylene glycol brassylate, cyclic diester; Ethylene brassylate; Ethylene undecane dicarboxylate	1,4-Dioxacycloheptadecan-5,17-dione	
09.534			
09.535			
09.536			
09.537			
09.538	2-Phenylethyl 2-methylbutanoate; Benzylcarbonyl 2-methylbutyrate; beta-Phenethyl alpha-methylbutanoate		
09.539	Oct-3-yl tiglate; 1-Ethylhexyl 2-methyl-2-butenolate; 1-Ethylhexyl 2-methylcrotonate; 3-Octyl tiglate	1-Ethylhexyl 2-methylbut-2(trans)-enoate	
09.540			
09.541			
09.542	Ethyl beta-ketohexanoate		
09.543			
09.544			
09.545		Hex-3-enyl 2-hydroxypropanoate	
09.546			
09.547			
09.548	Methyl 2-hydroxyisocaproate;		
09.549	Methyl 2-methylvalerate		
09.550	Methyl 2-keto-3-methylpentanoate; Methyl 2-keto-3-methylvalerate; Methyl 3-methyl-2-oxovalerate;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.551	08	59259-38-0	L-Menthyl lactate	3748		261-678-3
09.552	30	91052-69-6	3-Oxodecanoic acid glyceride	3767	10650	293-231-3
09.553	30	91052-70-9	3-Oxododecanoic acid glyceride	3768	10651	293-232-9
09.554	30	91052-71-0	3-Oxoheptadecanoic acid glyceride	3769	10652	293-233-4
09.555	30	91052-72-1	3-Oxohexanoic acid glyceride	3770	10653	293-235-5
09.556	30	91052-68-5	3-Oxooctanoic acid glyceride	3771	10654	293-230-8
09.557	30	91052-73-2	3-Oxotetradecanoic acid glyceride	3772	10655	293-236-0
09.558	09	108-59-8	Dimethyl malonate		11754	203-597-8
09.559	04	67883-79-8	Hex-3(cis)-enyl 2-methylcrotonate	3931		267-554-5
09.560	23	121432-33-5	Hex-3(cis)-enyl anisate			
09.561	27	65405-76-7	Hex-3(cis)-enyl anthranilate	3925	10676	265-744-2
09.562	04	56922-80-6	trans-3-Hexenyl formate	3353		260-442-7
09.563	04	41519-23-7	Hex-3(cis)-enyl isobutyrate	3929	11783	255-424-0
09.564	04	33467-74-2	Hex-3(cis)-enyl propionate	3933	10683	251-533-2
09.565	09	68133-76-6	Hex-3-enyl 2-oxopropionate	3934	10684	268-703-7
09.566	04	65405-80-3	Hex-3-enyl but-2-enoate			265-746-3
09.567	04	85554-69-4	Hex-3-enyl decanoate			287-601-3
09.568	04	53398-87-1	Hex-3-enyl hex-2-enoate	3928		
09.569	04	61444-41-5	Hex-3-enyl octanoate			262-799-4
09.570	23	65405-77-8	Hex-3-enyl salicylate		10685	265-745-8
09.571	04	35852-46-1	Hex-3-enyl valerate	3936	10686	252-761-5
09.572	04	42125-17-7	Hex-4-enyl acetate			
09.573	03	1516-17-2	Hexa-2,4-dienyl acetate		10675	216-163-8
09.574	01	629-70-9	Hexadec-1-yl acetate			211-103-7
09.575	04	61444-39-1	3-Hexenyl heptanoate			262-798-9
09.576	05	5953-49-1	sec-Hexyl acetate		10840	227-716-8
09.577	05	6963-52-6	sec-Hexyl butyrate			
09.578	01	19089-92-0	Hexyl crotonate	3354	10688	240-997-1
09.579	01	34316-64-8	Hexyl dodecanoate			251-932-1

FL No	Synonyms	Systematic name	Comments
09.551	5-Methyl-2-(1-methylethyl)cyclohexyl alpha-hydroxypropanoate; L-p-Menthan-3-yl lactate		
09.552	Glyceryl beta-ketodecanoate; Glyceryl monoester of 3-oxodecanoic acid		
09.553	Glyceryl beta-ketododecanoate; Glyceryl monoester of 3-oxododecanoic acid		
09.554	Glyceryl beta-ketohexadecanoate; Glyceryl monoester of 3-oxohexadecanoic acid		
09.555	Glyceryl beta-ketohexanoate; Glyceryl diester of 3-oxohexanoic acid		
09.556	Glyceryl beta-ketooctanoate; Glyceryl monoester of 3-oxooctanoic acid		
09.557	Glyceryl beta-ketotetradecanoate; Glyceryl monoester of 3-oxotetradecanoic acid		
09.558	Dimethyl azelate	Dimethyl propanedioate	
09.559	cis-3-Hexenyl tiglate; cis-3-Hexenyl-2-methyl-trans-2-butenoate; (Z)-3-Hexenyl 2-methylcrotonate;	Hex-3(cis)-enyl 2-methylbut-2(trans)-enoate	
09.560		Hex-3(cis)-enyl(4-methoxy)-benzoate	
09.561	(Z)-Hexenyl 2-aminobenzoate; (Z)-Hex-3-enyl anthranilate; cis-3-Hexenyl anthranilate	Hex-3(cis)-enyl 2-aminobenzoate	
09.562			5
09.563	beta, gamma-Hexenyl isobutanoate; (Z)-Hex-3-enyl isobutyrate; cis-3-Hexenyl isobutyrate	Hex-3(cis)-enyl 2-methylpropanoate	
09.564	beta, gamma-Hexenyl propanoate; (E)-Hex-2-enyl propionate; trans-2-Hexenyl propionate		
09.565	Hex-3-enyl pyruvate		5
09.566			5
09.567			5
09.568			5
09.569			5
09.570		Hex-3-enyl 2-hydroxybenzoate	
09.571	Hex-3-enyl pentanoate; cis-3-Hexenyl pentanoate; cis-3-Hexenyl valerate; (Z)-Hex-3-enyl valerate		5
09.572			
09.573			
09.574	Cetyl acetate		
09.575			5
09.576		1-Methylpentyl acetate	
09.577		1-Methylpentyl butanoate	
09.578		Hexyl but-2(trans)-enoate	
09.579			

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.580	09	20279-51-0	Hexyl lactate			243-676-4
09.581	23	6259-76-3	Hexyl salicylate		10695	228-408-6
09.582	01	42231-99-2	Hexyl tetradecanoate			255-722-0
09.583	01	1117-59-5	Hexyl valerate		10696	214-248-4
09.584	08	85586-67-0	Isobornyl isobutyrate			287-872-8
09.585	02	2445-67-2	Isobutyl 2-methylbutyrate		10710	219-492-5
09.586	02	97-86-9	Isobutyl 2-methylprop-2-enoate			202-613-0
09.587	02	30673-38-2	Isobutyl decanoate		10707	250-281-0
09.588	02	37811-72-6	Isobutyl dodecanoate		10708	253-675-0
09.589	02	110-34-9	Isobutyl hexadecanoate		10715	203-758-2
09.590	09	585-24-0	Isobutyl lactate		10709	209-551-3
09.591	02	30982-03-7	Isobutyl nonanoate		10713	250-411-6
09.592	02	646-13-9	Isobutyl octadecanoate			211-466-1
09.593	02	5461-06-3	Isobutyl octanoate		10714	226-744-8
09.594	02	25263-97-2	Isobutyl tetradecanoate		10712	246-765-6
09.596	02	10482-55-0	Isopentyl 2-methylcrotonate			233-985-2
09.597	02	25415-77-4	Isopentyl but-2-enoate			246-958-5
09.598	02	2306-91-4	Isopentyl decanoate			218-982-6
09.599	02	109-25-1	Isopentyl heptanoate		10719	203-658-9
09.600	02	81974-61-0	Isopentyl hexadecanoate		10723	279-864-8
09.601	09	19329-89-6	Isopentyl lactate		10720	242-966-8
09.602	02	62488-24-8	Isopentyl tetradecanoate		10722	263-570-1
09.603	05	6284-46-4	Isopropyl crotonate		10729	
09.604	05	2311-59-3	Isopropyl decanoate		10730	219-001-4
09.605	05	10233-13-3	Isopropyl dodecanoate			233-560-1
09.606	05	142-91-6	Isopropyl hexadecanoate		10732	205-571-1
09.608	05	5458-59-3	Isopropyl octanoate		10731	226-721-2
09.609	05	18362-97-5	Isopropyl valerate			242-235-3

FL No	Synonyms	Systematic name	Comments
09.580		Hexyl 2-hydroxypropanoate	
09.581	n-Hexyl o-hydroxybenzoate	Hexyl 2-hydroxybenzoate	
09.582			
09.583	Hexyl pentanoate		
09.584	Isobornyl 2-methylpropionate	1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl 2-methylpropanoate	
09.585		2-Methylpropyl 2-methylbutanoate	
09.586		2-Methylpropyl 2-methylprop-2-enoate	
09.587		2-Methylpropyl decanoate	
09.588		2-Methylpropyl dodecanoate	
09.589	Isobutyl palmitate	2-Methylpropyl hexadecanoate	
09.590		2-Methylpropyl 2-hydroxypropanoate	
09.591		2-Methylpropyl nonanoate	
09.592	Isobutyl stearate	2-Methylpropyl octadecanoate	
09.593		2-Methylpropyl octanoate	
09.594	Isobutyl myristate	2-Methylpropyl tetradecanoate	
09.596	Isoamyl angelate	3-Methylbutyl 2-methylbut-2(trans)-enoate	
09.597	Isoamyl 2-butenolate	3-Methylbutyl but-2-enoate	
09.598		3-Methylbutyl decanoate	
09.599		3-Methylbutyl heptanoate	
09.600	Isoamyl palmitate	3-Methylbutyl hexadecanoate	
09.601		3-Methylbutyl 2-hydroxypropanoate	
09.602	Isoamyl myristate	3-Methylbutyl tetradecanoate	
09.603		Isopropyl but-2(trans)-enoate	
09.604	Isopropyl caprate		
09.605	Isopropyl laurate		
09.606	Isopropyl palmitate		
09.608	Isopropyl caprylate		
09.609	Isopropyl pentanoate		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.610	08	579-94-2	2-Isopropyl-5-methylcyclohexyl ethoxyacetate			209-448-3
09.611	23	59230-57-8	4-Isopropylbenzyl acetate			261-671-5
09.612	04	25905-14-0	Lavandulyl acetate			247-327-7
09.614	06	10471-96-2	Linalyl valerate		10738	233-961-1
09.615	07	28839-13-6	p-Menth-1-en-9-yl acetate	3566	10748	249-266-1
09.616	08	77341-67-4	mono-Menth-3-yl succinate	3810		
09.617	06	58985-18-5	p-Menthan-8-yl acetate			261-543-9
09.618	08	2230-90-2	Menthyl formate		10751	218-768-2
09.619	08	6070-16-2	Menthyl hexanoate			228-007-6
09.620	15	26171-78-8	Menthyl phenylacetate			247-498-8
09.621	25	89-46-3	Menthyl salicylate			201-909-7
09.622	01	598-98-1	Methyl 2,2-dimethylpropionate		10790	209-959-1
09.623	23	4707-47-5	Methyl 2,4-dihydroxy-3,6-dimethylbenzoate			225-193-0
09.624	01	6622-76-0	Methyl 2-methylcrotonate			229-575-8
09.625	01	33603-30-4	Methyl 2-methylpent-3-enoate			
09.626	09	600-22-6	Methyl 2-oxopropionate		10848	209-987-4
09.627	09	139564-42-4	Methyl 3-acetoxy-2-methylbutyrate			
09.628	09	89422-42-4	Methyl 3-acetoxybutyrate			
09.629	09	21188-60-3	Methyl 3-acetoxyhexanoate		10755	244-262-6
09.630	01	924-50-5	Methyl 3-methylbut-2-enoate			213-107-4
09.631	23	99-75-2	Methyl 4-methylbenzoate			202-784-1
09.632	09	35234-22-1	Methyl 5-acetoxyhexanoate		10756	
09.633	09	101853-47-8	Methyl 5-hydroxydecanoate			
09.634	09	105-45-3	Methyl acetoacetate			203-299-8
09.635	01	96-33-3	Methyl acrylate		10759	202-500-6
09.636	01	623-43-8	Methyl crotonate			210-793-7
09.637	01	2482-39-5	Methyl dec-2-enoate		11799	219-618-9
09.638	01	7367-83-1	Methyl dec-4-enoate		10784	230-914-7
09.639	01	4493-42-9	Methyl deca-2,4-dienoate	3859		224-787-7
09.640	01	1191-03-3	Methyl deca-4,8-dienoate		10782	
09.641	01	6208-91-9	Methyl dodec-2-enoate		10792	
09.642	01	107-31-3	Methyl formate		10795	203-481-7
09.643	01	1189-09-9	Methyl geranate		10797	214-712-6
09.644	09	27871-49-4	Methyl lactate			248-704-9
09.645	01	112-63-0	Methyl linoleate	3411	713	203-993-0
09.646	01	301-00-8	Methyl linolenate	3411	714	206-102-3
09.647	01	80-62-6	Methyl methacrylate			201-297-1

FL No	Synonyms	Systematic name	Comments
09.610	Coryfin B		
09.611	Cuminylnyl acetate		
09.612		5-Methyl-2-(1-methylethyl)hex-4-enyl acetate	
09.614	Linalyl pentanoate	1,5-Dimethyl-1-vinylhex-4-enyl pentanoate	
09.615			
09.616	Butanedioic acid, mono[5-methyl 2-(1-methyl-ethyl)cyclohexyl] ester, [1R-(1-alpha,2-beta,5-alpha)]	3-(5-methyl-2-isopropylcyclohexoxycarbonyl)propanoic acid	
09.617	Dihydro-alpha-terpinyl acetate		
09.618		p-Menthane-3-yl formate	
09.619		p-Menthane-3-yl hexanoate	5
09.620	(-)-Menthyl phenylacetate		
09.621	Menthyl 2-hydroxybenzoate	p-Menthane-3-yl 2-hydroxybenzoate	
09.622	Methyl pivalate		
09.623			
09.624	Methyl tiglate	Methyl 2-methylbut-2(trans)-enoate	
09.625			
09.626	Methyl pyruvate		
09.627			
09.628			
09.629			
09.630	Methyl senecioate		
09.631	Methyl p-toluate		
09.632			
09.633			
09.634	Methyl acetyl acetate	Methyl 3-oxobutanoate	
09.635		Methyl prop-2-enoate	
09.636	2-Butenoic acid, methyl ester	Methyl but-2(trans)-enoate	
09.637			
09.638			5
09.639			
09.640			
09.641			
09.642			
09.643		Methyl 3,7-dimethyl-2(trans),6-octadienoate	
09.644		Methyl 2-hydroxypropanoate	5
09.645	Methyl octadeca-9(cis),12(cis)-dienoate		5
09.646	Methyl octadeca-9(cis),12(cis),15(cis)-trienoate		5
09.647		Methyl 2-methylprop-2-enoate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.648	27	10072-05-6	Methyl N,N-dimethylantranilate			233-202-4
09.649	27	2719-08-6	Methyl N-acetylantranilate			220-318-5
09.650	27	41270-80-8	Methyl N-formylantranilate			255-287-7
09.651	01	112-61-8	Methyl octadecanoate		10849	203-990-4
09.652	01	112-62-9	Methyl oleate		10836	203-992-5
09.653	01	1731-86-8	Methyl undecanoate		10854	217-053-2
09.654	30	68227-51-0	2-Methyl-5-oxocyclopent-1-enyl butyrate		11787	269-363-2
09.655	04	5205-07-2	3-Methylbut-3-enyl acetate			225-996-6
09.656	23	5205-12-9	3-Methylbut-3-enyl benzoate			
09.657	05	626-38-0	1-Methylbutyl acetate		10761	210-946-8
09.658	05	60415-61-4	1-Methylbutyl butyrate	3893	10763	262-226-8
09.659	02	51115-64-1	2-Methylbutyl butyrate			256-973-9
09.660	02	55195-23-8	2-Methylbutyl decanoate		10765	
09.661	02	35073-27-9	2-Methylbutyl formate			252-343-2
09.662	02	2601-13-0	2-Methylbutyl hexanoate		10768	220-005-3
09.663	02	2445-69-4	2-Methylbutyl isobutyrate		10770	219-493-0
09.664	02	67121-39-5	2-Methylbutyl octanoate		10776	
09.665	02	2438-20-2	2-Methylbutyl propionate		10778	219-449-0
09.666	02	93805-23-3	2-Methylbutyl tetradecanoate		10774	298-506-1
09.669	06	1118-39-4	Myrcenyl acetate		10857	214-262-0
09.670	07	29021-36-1	Myrtanyl acetate			249-371-2
09.671	06	56001-43-5	Nerolidyl acetate		10862	259-941-2
09.672	04	13049-88-2	Non-3-enyl acetate			
09.673	04	76238-22-7	Non-6-enyl acetate			278-397-7
09.674	04	76649-26-8	Nona-3,6-dienyl acetate			278-519-9
09.676	05	2051-50-5	sec-Octyl acetate		10799	218-123-5
09.677	01	4887-30-3	Octyl hexanoate		10865	225-499-4
09.678	03	74298-89-8	Pent-2-enyl hexanoate			277-808-7
09.679	01	68039-26-9	Pentyl 2-methylbutyrate		10875	268-244-2
09.680	01	7785-63-9	Pentyl 2-methylisocrotonate			232-083-6
09.681	01	5350-03-8	Pentyl dodecanoate			226-319-7
09.682	01	31148-31-9	Pentyl hexadecanoate			250-487-0
09.683	09	6382-06-5	Pentyl lactate			228-974-4
09.684	15	64181-20-0	Phenethyl crotonate		10880	
09.685	15	61810-55-7	2-Phenethyl decanoate		10881	263-237-0

FL No	Synonyms	Systematic name	Comments
09.648		Methyl N,N-dimethyl-2-aminobenzoate	
09.649		Methyl N-acetyl-2-aminobenzoate	
09.650		Methyl N-formyl-2-aminobenzoate	
09.651	Methyl stearate		
09.652	Methyl 9-octadecenoate	Methyl octadec-9-enoate	
09.653			
09.654	Methylcyclopentenolone butyrate; Maple lactone butyrate		
09.655			
09.656			
09.657	Pent-2-yl acetate		
09.658	Pent-2-yl butyrate		
09.659			
09.660			
09.661			
09.662			
09.663	2-Methylpropionic acid, 2-methylbutyl ester;	2-Methylbutyl 2-methylpropanoate	
09.664			
09.665			
09.666	Methylbutyl myristate		
09.669		7-Methyl-3-methyleneoct-1-en-7-yl acetate	
09.670		(6,6-dimethyl-bicyclo[3.1.1]heptan-2-yl)methyl acetate	
09.671		1,5,9-Trimethyl-1-vinyl-4(cis),8-decadienyl acetate	
09.672			
09.673			5
09.674			
09.676		1-Methylheptyl acetate	
09.677			
09.678			5
09.679	Amyl 2-methylbutyrate		
09.680	Amyl angelate	Pentyl 2-methylbut-2(cis)-enoate	
09.681	Amyl dodecanoate		
09.682	Amyl palmitate		
09.683		Pentyl 2-hydroxypropanoate	
09.684		Phenylethyl but-2(trans)-enoate	
09.685	Phenethyl caprate		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.686	15	10138-63-3	Phenethyl lactate			
09.687	15	23511-70-8	2-Phenoxyethyl butyrate			245-705-6
09.688	25	122-79-2	Phenyl acetate	3958	10878	204-575-0
09.689	25	118-55-8	Phenyl salicylate	3960	11814	204-259-2
09.690	22	7402-29-1	3-Phenylpropyl butyrate			231-005-8
09.691	03	10236-16-5	Phytyl acetate			233-565-9
09.692	03	1191-16-8	Prenyl acetate		11796	214-730-4
09.693	23	5205-11-8	Prenyl benzoate			225-998-7
09.694	03	68480-28-4	Prenyl formate			270-906-0
09.695	03	76649-23-5	Prenyl isobutyrate			278-516-2
09.696	23	68555-58-8	Prenyl salicylate			271-434-8
09.698	01	37064-20-3	Propyl 2-methylbutyrate		10891	253-329-9
09.699	01	10352-87-1	Propyl crotonate			233-768-2
09.700	01	30673-60-0	Propyl decanoate			250-283-1
09.701	15	7493-74-5	Allyl phenoxyacetate	2038	228	231-335-2
09.702	15	4606-15-9	Propyl phenylacetate	2955	229	225-012-5
09.703	15	122-45-2	Octyl phenylacetate	2812	230	204-545-7
09.704	15	102-22-7	Geranyl phenylacetate	2516	231	203-014-7
09.705	23	102-16-9	Benzyl phenylacetate	2149	232	203-008-4
09.706	23	102-17-0	Anisyl phenylacetate	3740	233	203-010-5
09.707	15	102-20-5	Phenethyl phenylacetate	2866	234	203-013-1
09.708	22	7492-65-1	Cinnamyl phenylacetate	2300	235	231-322-1
09.709	15	101-94-0	p-Tolyl phenylacetate	3077	236	202-990-1
09.710	17	120-24-1	Isoeugenyl phenylacetate	2477	237	204-381-6
09.711	25	4112-89-4	Guaiacyl phenylacetate	2535	238	223-898-8
09.712	15	1323-75-7	Santalyl phenylacetate	3008	239	215-358-5
09.713	23	121-98-2	Methyl 4-methoxybenzoate	2679	248	204-513-2
09.714	23	94-30-4	Ethyl 4-methoxybenzoate	2420	249	202-320-8
09.715	27	134-20-3	Methyl anthranilate	2682	250	205-132-4
09.716	27	87-25-2	Ethyl anthranilate	2421	251	201-735-1

FL No	Synonyms	Systematic name	Comments
09.686		2-Phenylethyl 2-hydroxypropanoate	
09.687			
09.688	(Acetyloxy) benzene; Phenol acetate; Acetoxybenzene		
09.689	Salol; Phenyl 2-hydroxybenzoate	Phenyl-o-hydroxybenzoate	
09.690			
09.691		3,7,11,15- Tetramethylhexadec-2-enyl acetate	5
09.692		3-Methylbut-2-enyl acetate	
09.693		3-Methylbut-2-enyl benzoate	
09.694		3-Methylbut-2-enyl formate	
09.695		3-Methylbut-2-enyl 2-methylpropanoate	
09.696		3-Methylbut-2-enyl 2-hydroxybenzoate	
09.698			
09.699		Propyl but-2(trans)-enoate	
09.700	Propyl caprate		
09.701	Acetate P.A.; 2-Propenyl phenoxyacetate		
09.702	Propyl alpha-toluate; Propyl alpha-Toluate		
09.703	Octyl alpha-toluate		
09.704	Geranyl alpha-toluate; Trans-3,7-Dimethyl-2,6-octadien-1-yl-phenylacetate	3,7-Dimethylocta-2(trans),6-dienyl phenyl acetate	
09.705	Benzyl alpha-toluate; Phenylacetic acid, benzyl ester; Benzyl-2-phenyl ethanoate		
09.706	4-Methoxybenzyl phenylacetate; Anisyl alpha-toluate; p-Methoxybenzyl phenylacetate; Phenylacetic acid, p-methoxybenzyl ester		
09.707	Phenylethyl phenylacetate; Phenethyl alpha-toluate; 2-Phenylethyl alpha-toluate; 2-Phenylethyl phenylacetate		
09.708	3-Phenyl-2-propen-1-yl phenylacetate; Cinnamyl alpha-toluate; 3-Phenylallyl phenylacetate;	3-Phenylprop-2-enyl phenyl acetate	
09.709	p-Cresyl alpha-toluate; p-Cresyl phenylacetate; p-Tolyl alpha-Toluate;	4-Methylphenyl phenylacetate	
09.710	2-methoxy-4-phenyl phenylacetate; 4-Propenylguaiacyl phenylacetate; Isoeugenyl alpha-Toluate	2-Methoxy-4-(prop-1-enyl)phenyl phenylacetate	
09.711	o-Methylcatechol acetate; Guaiacol phenylacetate; o-Methoxyphenyl phenylacetate	2-Methoxyphenyl phenylacetate	
09.712	alpha-Santalyl phenylacetate; beta-Santalyl phenylacetate; Santalyl alpha-toluate		4
09.713	Methyl p-methoxybenzoate; Methyl p-anisate; Methyl anisate;		
09.714	Ethyl p-methoxybenzoate; Ethyl p-anisate; Ethyl anisate;		
09.715	Methyl o-Aminobenzoate; o-Amino methyl benzoate	Methyl 2-aminobenzoate	
09.716	Ethyl o-Aminobenzoate	Ethyl 2-aminobenzoate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.717	27	7756-96-9	Butyl anthranilate	2181	252	231-816-7
09.718	27	7779-77-3	Isobutyl anthranilate	2182	253	231-938-0
09.719	27	7493-63-2	Allyl anthranilate	2020	254	231-331-0
09.721	06	7149-26-0	Linalyl anthranilate	2637	256	230-472-5
09.722	27	7779-16-0	Cyclohexyl anthranilate	2350	257	231-920-2
09.723	15	133-18-6	Phenethyl anthranilate	2859	258	205-098-0
09.724	06	14481-52-8	alpha-Terpinyl anthranilate	3048	259	
09.725	23	93-58-3	Methyl benzoate	2683	260	202-259-7
09.726	23	93-89-0	Ethyl benzoate	2422	261	202-284-3
09.727	23	120-51-4	Benzyl benzoate	2138	262	204-402-9
09.728	22	10031-93-3	Ethyl 4-phenylbutyrate	2453	307	
09.729	22	2046-17-5	Methyl 4-phenylbutyrate	2739	308	218-067-1
09.730	22	103-36-6	Ethyl cinnamate	2430	323	203-104-6
09.731	22	7778-83-8	Propyl cinnamate	2938	324	231-916-0
09.732	22	7780-06-5	Isopropyl cinnamate	2939	325	231-949-0
09.733	22	538-65-8	Butyl cinnamate	2192	326	208-699-6
09.734	22	122-67-8	Isobutyl cinnamate	2193	327	204-564-0
09.735	22	3487-99-8	Pentyl cinnamate		328	222-478-1
09.736	06	78-37-5	Linalyl cinnamate	2641	329	201-110-3
09.737	06	10024-56-3	Terpinyl cinnamate	3051	330	233-023-1
09.738	23	103-41-3	Benzyl cinnamate	2142	331	203-109-3
09.739	22	122-69-0	Cinnamyl cinnamate	2298	332	204-566-1
09.740	22	103-26-4	Methyl cinnamate	2698	333	203-093-8

FL No	Synonyms	Systematic name	Comments
09.717	Butyl 2-Aminobenzoate; Butyl o-Aminobenzoate	Butyl 2-aminobenzoate	
09.718	Isobutyl 2-aminobenzoate; Isobutyl o-Aminobenzoate	2-Methylpropyl 2-aminobenzoate	
09.719	Allyl o-aminobenzoate; 2-Propenyl 2-aminobenzoate; 2-Propenyl anthranilate	Allyl 2-aminobenzoate	
09.721	Linalyl o-aminobenzoate; 3,7-Dimethyl-1,6-octadien-3-yl-2-aminobenzoate; Linalyl 2-aminobenzoate;	1,5-Dimethyl-1-vinylhex-4-enyl 2-amino-benzoate	
09.722		Cyclohexyl 2-aminobenzoate	
09.723	2-Phenylethyl anthranilate; Beta-Phenylethyl o-Aminobenzoate	2-Phenylethyl 2-aminobenzoate	
09.724	p-Menth-1-en-8-yl anthranilate; p-Mentha-1-en-8-yl 2-aminobenzoate; Terpinyl o-Aminobenzoate	p-Menth-1-en-8-yl 2-aminobenzoate	
09.725	Methyl benzenecarboxylate		
09.726	Ethyl benzenecarboxylate; Ethyl benzene carboxylate		
09.727	Benzoic acid benzyl ester; Benzyl benzenecarboxylate; Benzyl phenylformate		
09.728	Butanoic acid, 4-methyl, ethyl ester; Ethyl 4-phenyl-butanoate;		
09.729	Methyl gamma-phenylbutyrate		
09.730	Ethyl beta-phenylacrylate; Ethyl trans-cinnamate; Ethyl 3-phenylpropenoate; Ethyl phenylacrylate;	Ethyl 3-phenylprop-2-enoate	
09.731	n-propyl 3-phenylpropenoate; n-Propyl beta-phenylacrylate;	Propyl 3-phenylprop-2-enoate	
09.732	Propyl iso cinnamate; Isopropyl 3-phenylpropenoate; 1-Methylethyl 3-phenylpropenoate;	Isopropyl 3-phenylprop-2-enoate	
09.733	Butyl 3-phenylpropenoate; Butyl beta-Phenylacrylate; n-Butyl phenylacrylate; Cinnamic acid, butyl ester;	Butyl 3-phenylprop-2-enoate	
09.734	2-Methylpropyl beta-phenylacrylate; 2-Methylpropyl 3-phenylpropenoate; Isobutyl beta-phenylacrylate;	2-Methylpropyl 3-phenylprop-2-enoate	
09.735	Amyl cinnamate; Cinnamic acid amyl ester; Pentyl-3-phenyl prop-2-enoate;	Pentyl 3-phenylprop-2-enoate	
09.736	3,7-Dimethyl-1,6-octadien-3-yl cinnamate; Linalyl 3-phenylpropenoate; 3,7-Dimethyl-1,6-octadien-3-yl beta-phenylacrylate	1,5-Dimethyl-1-vinylhex-4-enyl 3-phenylprop-2-enoate	
09.737	Terpinyl 3-phenylpropenoate; Terpinyl beta-Phenylacrylate;	p-Menth-1-en-8-yl cinnamate	5
09.738	Cinnamein; Benzyl beta-phenylacrylate; 2-Propenoic acid, 3-phenyl, phenylmethyl ester;	Benzyl 3-phenylprop-2-enoate	
09.739	Styracin; Phenylallyl cinnamate; 3-Phenyl-2-propen-1-yl 3-phenylpropenoate	3-Phenylprop-2-enyl 3-Phenylprop-2-enoate	
09.740	Methyl 3-phenylpropenoate; Methyl-3-phenyl prop-2-enoate;	Methyl 3-phenylprop-2-enoate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.741	22	1866-31-5	Allyl cinnamate	2022	334	217-477-8
09.742	22	7779-65-9	Isopentyl cinnamate	2063	335	231-931-2
09.743	15	103-53-7	Phenethyl cinnamate	2863	336	203-120-3
09.744	22	7779-17-1	Cyclohexyl cinnamate	2352	337	231-921-8
09.745	22	122-68-9	3-Phenylpropyl cinnamate	2894	338	204-565-6
09.746	22	103-25-3	Methyl 3-phenylpropionate	2741	427	203-092-2
09.747	22	2021-28-5	Ethyl 3-phenylpropionate	2455	429	217-966-6
09.748	23	118-61-6	Ethyl salicylate	2458	432	204-265-5
09.749	23	119-36-8	Methyl salicylate	2745	433	204-317-7
09.750	23	87-19-4	Isobutyl salicylate	2213	434	201-729-9
09.751	23	87-20-7	Isopentyl salicylate	2084	435	201-730-4
09.752	23	118-58-1	Benzyl salicylate	2151	436	204-262-9
09.753	15	87-22-9	Phenethyl salicylate	2868	437	201-732-5
09.754	23	94-26-8	Butyl 4-hydroxybenzoate	2203	525	202-318-7
09.755	23	94-46-2	Isopentyl benzoate	2058	562	202-334-4
09.756	15	94022-06-7	Isobornyl phenylacetate		566	301-499-0
09.757	23	120-50-3	Isobutyl benzoate	2185	567	204-401-3
09.758	15	3549-23-3	Methyl p-tert-butylphenylacetate	2690	577	222-602-4
09.761	15	5137-52-0	Pentyl phenylacetate		612	225-895-7
09.762	23	2050-08-0	Pentyl salicylate		613	218-080-2
09.763	23	2052-14-4	Butyl salicylate	3650	614	218-142-9
09.764	27	38446-21-8	Ethyl N-ethylanthranilate		629	253-935-3

FL No	Synonyms	Systematic name	Comments
09.741	Allyl-beta-phenylacrylate; Propenyl cinnamate; Allyl-3-phenyl propenoate; Allyl beta-phenylacrylate	Allyl 3-phenylprop-2-enoate	
09.742	Pentyl iso cinnamate; Isoamyl cinnamate; Isopentyl 3-phenylpropenoate; Isopentyl beta-phenylacrylate;	3-Methylbutyl 3-phenylprop-2-enoate	
09.743	Benzyl carbinyl cinnamate; Benzylcarbinyl cinnamate; 2-Phenylethyl 3-phenylpropenoate; beta-Phenethyl beta-phenylacrylate;	Phenethyl 3-phenylprop-2-enoate	
09.744	Cyclohexyl 3-phenylpropenoate; Cyclohexyl beta-phenylacrylate; Cyclohexyl-3-phenyl prop-2-enoate;	Cyclohexyl 3-phenylprop-2-enoate	
09.745	Hydrocinnamyl cinnamate; Phenylpropyl cinnamate; Hydrocinnamyl 3-phenylpropenoate; 3-Phenylpropyl beta-phenylacrylate	3-Phenylpropyl 3-phenylprop-2-enoate	
09.746	Methyl hydrocinnamate; Methyl Dihydrocinnamate;		
09.747	Ethyl hydrocinnamate; Ethyl dihydrocinnamate;		
09.748	Salicylic ether; Salicylic acid, ethyl ester	Ethyl 2-hydroxybenzoate	
09.749		Methyl 2-hydroxybenzoate	
09.750	2-Methyl-1-propyl salicylate; 2-Methylpropyl o-hydroxybenzoate; Butyl salicylate; Isobutyl o-Hydroxybenzoate;	2-Methylpropyl 2-hydroxybenzoate	
09.751	Isopentyl o-hydroxybenzoate; Salicylic acid, isopentyl ester; Isoamyl o-hydroxybenzoate; 3-Methylbutyl salicylate;	3-Methylbutyl 2-hydroxybenzoate	
09.752	Benzoic acid, 2-hydroxy, phenylmethyl ester; Benzyl o-hydroxybenzoate; Salicylic acid, benzyl ester;	Benzyl 2-hydroxybenzoate	
09.753	2-Phenylethyl salicylate; Benzylcarbinyl 2-hydroxybenzoate; Benzylcarbinyl salicylate;	2-Phenylethyl 2-hydroxybenzoate	
09.754	Butyl p-hydroxy benzoate; Butyl parasept; p-Hydroxybenzoic acid butyl ester		4
09.755	Isoamyl benzoate; Pentyl iso benzoate; Amyl iso benzoate; Isopentyl phenyl methanoate	3-Methylbutyl benzoate	
09.756	exo-2-Bornyl phenylacetate	1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl phenylacetate	
09.757	Isobutyl phenyl methanoate	2-Methylpropyl benzoate	
09.758		Methyl 4-(1,1-dimethylethyl)phenylacetate	
09.761	Amyl phenylacetate;		
09.762	Isoamyl o-hydroxybenzoate; Isoamyl salicylate	Pentyl 2-hydroxybenzoate	
09.763	Butyl (2-hydroxy-phenyl)-methanoate;	Butyl 2-hydroxybenzoate	
09.764		Ethyl N-ethyl-2-aminobenzoate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.765	27	35472-56-1	Ethyl N-methylantranilate		632	
09.766	18	531-26-0	Eugenyl benzoate	2471	636	208-504-4
09.767	23	94-48-4	Geranyl benzoate	2511	639	202-337-0
09.768	23	6789-88-4	Hexyl benzoate	3691	645	229-856-5
09.769	27	65505-24-0	Isobutyl N-methylantranilate		649	265-798-7
09.770	23	939-48-0	Isopropyl benzoate	2932	652	213-361-6
09.771	06	126-64-7	Linalyl benzoate	2638	654	204-796-2
09.772	06	7143-69-3	Linalyl phenylacetate	3501	655	230-444-2
09.774	15	94-47-3	Phenethyl benzoate	2860	667	202-336-5
09.776	23	2315-68-6	Propyl benzoate	2931	677	219-020-8
09.779	23	136-60-7	Butyl benzoate		740	205-252-7
09.780	22	5320-75-2	Cinnamyl benzoate		743	226-180-2
09.781	27	85-91-6	Methyl N-methylantranilate	2718	756	201-642-6
09.782	22	10032-08-3	Heptyl cinnamate	2551	2104	
09.783	15	101-41-7	Methyl phenylacetate	2733	2155	202-940-9
09.784	15	101-97-3	Ethyl phenylacetate	2452	2156	202-993-8
09.785	15	139-70-8	Citronellyl phenylacetate	2315	2157	205-373-5
09.786	15	4861-85-2	Isopropyl phenylacetate	2956	2158	225-468-5
09.787	15	122-43-0	Butyl phenylacetate	2209	2159	204-543-6
09.788	15	102-13-6	Isobutyl phenylacetate	2210	2160	203-007-9
09.789	15	102-19-2	3-Methylbutyl phenylacetate	2081	2161	203-012-6
09.790	03	1797-74-6	Allyl phenylacetate	2039	2162	217-281-2
09.791	15	10486-14-3	Rhodinyl phenylacetate	2985	2163	234-003-5
09.796	23	606-45-1	Methyl 2-methoxybenzoate	2717	2192	210-118-6
09.797	15	67028-40-4	Ethyl (p-tolyloxy)acetate	3157	2243	266-554-2
09.798	23	617-05-0	Ethyl vanillate		2302	210-503-9
09.799	23	3943-74-6	Methyl vanillate		2305	223-525-9

FL No	Synonyms	Systematic name	Comments
09.765		Ethyl N-methyl-2-aminobenzoate	
09.766	Benzoyl eugenol; Eugenol benzoate	4-Allyl-2-methoxyphenyl benzoate	
09.767	Geraniol benzoate; trans-3,7-Dimethyl-2,6-octadien-1-yl-benzoate	3,7-Dimethylocta-2(trans),6-dienyl benzoate	
09.768	n-Hexyl benzoate; Hexyl phenyl methanoate		
09.769		2-Methylpropyl N-methyl-2-aminobenzoate	
09.770	Propyl iso benzoate; 1-Methylethyl benzoate		
09.771	Linalool benzoate; 3,7-Dimethyl-1,6-octadien-3-yl benzoate	1,5-Dimethyl-1-vinylhex-4-enyl benzoate	
09.772	Linalyl alpha-toluate; 3,7-Dimethyl-1,6-octadien-3-yl phenylacetate; Linalyl alpha-Toluate	1,5-Dimethyl-1-vinylhex-4-enyl phenylacetate	
09.774	2-Phenylerythyl benzoate; Benzylcarbinyl benzoate		
09.776	Propyl phenyl methanoate		
09.779	n-Butyl benzoate		
09.780	3-Phenylallyl benzoate;	3-Phenylprop-2-enyl benzoate	
09.781	Dimethyl anthranilate; 2-Methylamino methyl benzoate; Methyl 2-Methylamonobenzoate; Methyl o-Methylaminobenzoate	Methyl N-methyl-2-aminobenzoate	
09.782	Heptyl-beta-phenylacrylate; Heptyl-3-phenyl propenoate;	Heptyl 3-phenylprop-2-enoate	
09.783	Methyl alpha-toluate; Methyl Alpha-Toluate		
09.784	Ethyl alpha-toluate; Alpha-Toluic acid, ethyl ester; Ethyl Alpha-Toluate		
09.785	3,7-Dimethyl-6-octen-1-yl phenylacetate; Citronellyl alpha-Toluate	3,7-Dimethyloct-6-enyl phenylacetate	
09.786	Isopropyl Alpha-Toluate		
09.787	Butyl Alpha-Toluate		
09.788	Isobutyl alpha-toluate	2-Methylpropyl phenylacetate	
09.789	Isoamyl phenylacetate; Isopentyl phenylacetate; Isoamyl Alpha-Toluate		
09.790	Allyl alpha-toluate; 2-Propenyl phenylacetate		
09.791	alpha-Citronellyl phenylacetate; 3,7-Dimethyl-7-octen-1-yl phenylacetate; Rhodinyl alpha-toluate	3,7-Dimethyloct-7-enyl 2-phenylacetate	5
09.796	o-Methoxybenzoic acid methyl ester; Dimethyl salicylate; Methyl o-anisate; Methyl salicylate o-methyl ether		
09.797	Ethyl cresoxyacetate; Vinigar naphtha	Ethyl (4-methylphenoxy)acetate	
09.798		Ethyl 4-hydroxy-3-methoxybenzoate	
09.799		Methyl 4-hydroxy-3-methoxybenzoate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.801	27	63449-68-3	2-Naphthyl anthranilate	2767	11862	264-155-8
09.802	22	2983-36-0	Ethyl 2-ethyl-3-phenylpropionate	3341	10587	221-042-8
09.803	23	19224-26-1	Propylene glycol dibenzoate	3419	10890	242-894-7
09.804	15	5421-17-0	Hexyl phenylacetate	3457	10694	226-537-2
09.805	15	42436-07-7	Hex-3(cis)-enyl phenylacetate	3633	10682	255-826-6
09.806	23	25152-85-6	Hex-3-enyl benzoate	3688	11778	246-669-4
09.807	25	617-01-6	o-Tolyl salicylate	3734		210-500-2
09.808	06	134-28-1	Guaiyl acetate		10659	205-135-0
09.809	07	15111-97-4	p-Mentha-1,8(10)-dien-9-yl acetate		10743	239-164-5
09.811	23	20665-85-4	Vanillin isobutyrate	3754		243-956-6
09.812	23	614-33-5	Glyceryl tribenzoate	3398	10656	210-379-6
09.813	01	3681-78-5	Propyl dodecanoate			222-961-7
09.814	01	2239-78-3	Propyl hexadecanoate		10893	218-803-1
09.815	09	616-09-1	Propyl lactate			210-464-8
09.816	01	624-13-5	Propyl octanoate		10892	210-830-7
09.817	15	10521-96-7	Styryl acetate			234-065-3
09.818	03	29548-30-9	3,7,11-Trimethyldodeca-2,6,10-trienyl acetate			249-689-1
09.819	02	58430-94-7	3,5,5-Trimethylhexyl acetate			261-245-9
09.820	01	1731-81-3	Undecyl acetate		10906	217-051-1
09.821	08	117-98-6	Vetiveryl acetate		11887	204-225-7
09.822	03	108-22-5	iso-Propenyl acetate			203-562-7
09.824	09	607-97-6	Ethyl 2-acetylbutyrate			210-151-6
09.825	23	2049-96-9	Pentyl benzoate		2307	218-077-6
09.828	01	2396-85-2	Methyl-2-octenoate	3712	11800	219-259-8
09.829	01	5452-75-5	Ethyl cyclohexyl acetate	2348	218	226-695-2
09.830	06	8007-35-0	Terpineol acetate	3047	205	201-265-7
09.831	01	13058-12-3	Ethyl 3,7-dimethyl-2,6-octadienoate			235-948-6
09.832	09	21188-61-4	Ethyl 3-acetohexanoate		10566	244-263-1
09.833	09	21884-26-4	iso-Propyl 4-oxopentanoate			244-630-6
09.835	23	42175-41-7	Benzyl decanoate			255-696-0
09.836	22	60045-26-3	3-Phenylpropyl benzoate			
09.837	22	60045-27-4	3-Phenylpropyl 3-phenylpropionate			262-036-5
09.838	04	67633-96-9	3-Hexenyl methyl carbonate			266-797-4
09.839	01	72928-48-4	Decyl 3-methylbutyrate			277-077-4
09.840	01	84788-08-9	Propyl-2,4-decadienoate	3648	10889	284-147-8
09.841	03	85554-72-9	2-Hexenyl octanoate			287-605-5
09.842	08	156679-39-9	Menthol ethylene glycol carbonate	3805		

FL No	Synonyms	Systematic name	Comments
09.801	2-Naphthyl o-Aminobenzoate	Naph-2-yl 2-aminobenzoate	
09.802	Ethyl alpha-ethylidihydrocinnamate; Ethyl benzylbutyrate; Ethyl 2-ethylidihydrocinnamate;		
09.803	1,2-Propanediol dibenzoate	Propan-1,2-diyl dibenzoate	
09.804	Hexyl Alpha-Toluate; Phenylacetic acid, hexyl ester		
09.805	beta,gamma-Hexenyl alpha-toluate; 3-Hexenyl alpha-toluate; beta, gamma-Hexenyl alpha-toluate; cis-Hexenyl phenylacetate		
09.806	3-Hexen-1-ol, benzoate		5
09.807	2-Methylphenyl 2-hydroxybenzoate; o-Cresyl salicylate;	2-Hydroxy-2-methylphenylbenzoate	
09.808	Guaiol acetate; Guaiacwood acetate; Guaiac acetate	6,10-Dimethyl-3-(1-methyl ethyl acetate)-bicyclo[5.3.0] dec-1(7)-ene	5
09.809	Limonen-9-yl acetate		
09.811	4-Isobutyryl-m-anisaldehyde; 3-Methoxy-4-isobutyrylbenzaldehyde; 4-formyl-2-methoxy-phenyl 2-methylpropionate	4-Formyl-2-methoxyphenyl 2-methylpropanoate	
09.812		Propanetri-1,2,3-yl tribenzoate	4
09.813	Propyl laurate		
09.814	Propyl palmitate		
09.815		Propyl 2-hydroxypropanoate	
09.816	Propyl caprylate		
09.817		2-Phenylethenyl acetate	
09.818	Farnesyl acetate		
09.819			
09.820			
09.821	Vetiver acetate; Vetivert acetate	2,6-Dimethyl-9-(1-methylethylidene)-bicyclo[5.3.0]dec-2-en-4-yl acetate	
09.822			
09.824			
09.825	Amyl benzoate; Isoamyl benzoate; 3-Methyl-1-butyl benzoate		
09.828			5
09.829			5
09.830			5
09.831	Ethyl geranate		
09.832			5
09.833	Isopropyl laevulinate		
09.835			
09.836			
09.837			
09.838			5
09.839			
09.840			
09.841			5
09.842			

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.843	08	30304-82-6	Menthol 1-and 2-propylene glycol carbonate	3806		
09.845	08	1205-42-1	cis-2-Methyl-5-(1-methylethenyl)-2-cyclohexen-1-yl acetate			214-883-7
09.846	04	2315-09-5	3-Hexenyl formate	3353	2153	219-017-1
09.848	08	5655-61-8	(1S-endo)-1,7,7-Trimethylbicyclo[2.2.1]heptan-2-ol acetate			227-101-4
09.849	05	10250-45-0	2,6-Dimethyl-4-heptyl acetate			233-588-4
09.850	01	27829-72-7	Ethyl trans-2-hexenoate	3675	631	248-681-5
09.852	23	51115-63-0	2-Methylbutyl 2-hydroxybenzoate			256-972-3
09.853	23	52513-03-8	2-Methylbutyl benzoate			257-982-0
09.854	04	53398-85-9	cis-3-Hexenyl 2-methylbutanoate	3497	2345	258-517-4
09.855	04	56922-82-8	trans-3-Hexenyl hexanoate			260-444-8
09.856	04	65405-80-3	cis-3-Hexenyl crotonate			265-746-3
09.857	09	63270-14-4	Nonanediol diacetate	2783		264-060-1
09.858	23	67674-41-3	Phenylmethyl 2-methyl-2-butenolate	3330	2184	266-880-5
09.862	09	85554-66-1	Ethyl 3-acetoxy octanoate			287-598-9
09.863	09	638-33-5	2-Methylbutyl lactate		10769	
09.865	01	20290-84-0	Hexyl 9-octadecenoate			243-692-1
09.866	03		Allyl valerate			
09.868	05		sec-Butyl 2-methylcrotonate			
09.870	08		Carvyl-3-methylbutyrate			
09.871	04		Citronellyl decanoate			
09.872	04		Citronellyl dodecanoate			
09.874	30		Di(2-methylbutyl) malate			
09.878	18	61114-24-7	Eugenyl isovalerate			
09.880	05		Hept-4-enyl-2 butyrate			
09.881	03		Hex-2(trans)-enyl isobutyrate			
09.883	04		Hex-3(cis)-enyl methyl carbonate			
09.884	04		Hex-3-enyl-2-ethylbutyrate			
09.885	04		Hex-3-enyl hexadecanoate			
09.887	01	16930-96-4	Hexyl tiglate			
09.888	08		Isobornyl 2-methylbutyrate			
09.889	02		Isobutyl 2-methylcrotonate			
09.890	04		Isoprenyl 2-methylbutyrate			
09.893	25		2-Isopropyl-5-methylphenyl formate			
09.894	17		2-Methoxy-4-(prop-1-enyl)phenyl 3-methylbutyrate			
09.895	23		4-Methoxybenzyl-2-methylpropionate			
09.896	03		2-Methylbut-2-enyl formate			

FL No	Synonyms	Systematic name	Comments
09.843			
09.845			
09.846			5
09.848			
09.849		1-isobutyl-3-methylbutyl acetate	
09.850			5
09.852			5
09.853			
09.854			5
09.855			
09.856		cis-3-Hexenyl trans-2-butenolate	5
09.857		Nonane-1,3-diyl diacetate	
09.858			
09.862			
09.863		2-Methylbutyl 2-hydroxypropanoate	
09.865	Hexyl oleate		
09.866	Allyl pentanoate		
09.868	2- Butyl tiglate	1-Methylpropyl 2-methylbut-2(trans)-enoate	
09.870	Carvyl isopentanoate	p-Mentha-6,8-dienyl-2-methylbutanoate	
09.871	Citronellyl caprate	3,7-Dimethyloct-6-enyl decanoate	
09.872	Citronellyl laurate	3,7-Dimethyloct-6-enyl dodecanoate	
09.874		Di-(2-methylbutyl) 2-hydroxybutanedioate	
09.878		4-Allyl-2-methoxyphenyl 3-methylbutanoate	
09.880		1-Methylhex-3-enyl butyrate	
09.881		Hex-2(trans)-enyl 2-methylpropanoate	
09.883			
09.884			
09.885	3- Hexenyl palmitate		
09.887		Hexyl 2-methylbut-2(trans)-enoate	
09.888		1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl 2-methylbutanoate	
09.889	Isobutyl tiglate	2-Methylpropyl 2-methylbut-2(trans)-enoate	
09.890		2-Methyl-1,3-butadienyl 2-methylbutanoate	
09.893	Thymyl formate		
09.894	Isoeugenyl isopentanoate		
09.895			
09.896			

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
09.897	04		3-Methylbut-3-en-1-yl butyrate			
09.898	04		3-Methylbut-3-en-1-yl hexanoate			
09.899	07		Myrtenyl-2-methylbutyrate			
09.900	07		Myrtenyl-3-methylbutyrate			
09.903	03		Prenyl 3-methylbut-2-enoate			
09.914	30		Diethyl citrate (asymm)			
09.915	23	94-13-3	Propyl 4-hydroxybenzoate	2951	678	202-307-7
09.916	09	7367-90-0	Ethyl 3-hydroxyoctanoate		10603	230-919-4
10.001	09	104-61-0	Nonano-1,4-lactone	2781	178	203-219-1
10.002	09	104-67-6	Undecano-1,4-lactone	3091	179	203-225-4
10.003	09	7779-50-2	Hexadec-6-eno-1,16-lactone	2555	180	231-929-1
10.004	09	106-02-5	Pentadecano-1,15-lactone	2840	181	203-354-6
10.005	11	17369-59-4	3-Propylidene-phthalide	2952	494	241-402-8
10.006	09	96-48-0	Butyro-1,4-lactone	3291	615	202-509-5
10.007	09	705-86-2	Decano-1,5-lactone	2361	621	211-889-1
10.008	09	713-95-1	Dodecano-1,5-lactone	2401	624	211-932-4
10.009	09	18679-18-0	Dodec-6-eno-1,4-lactone	3780	625	242-497-9
10.010	09	823-22-3	Hexano-1,5-lactone	3167	641	212-511-8
10.011	09	710-04-3	Undecano-1,5-lactone	3294	688	211-915-1
10.012	13	591-12-8	5-Methylfuran-2(3H)-one	3293	731	209-701-8
10.013	09	108-29-2	Pentano-1,4-lactone	3103	757	203-569-5
10.014	09	3301-94-8	Nonano-1,5-lactone	3356	2194	221-974-5
10.015	09	698-76-0	Octano-1,5-lactone	3214	2195	211-820-5
10.016	09	2721-22-4	Tetradecano-1,5-lactone	3590	2196	220-334-2
10.017	09	706-14-9	Decano-1,4-lactone	2360	2230	211-892-8
10.018	09	7774-47-2	4-Butyloctano-1,4-lactone	2372	2231	231-875-9
10.019	09	2305-05-7	Dodecano-1,4-lactone	2400	2240	218-971-6
10.020	09	105-21-5	Heptano-1,4-lactone	2539	2253	203-279-9

FL No	Synonyms	Systematic name	Comments
09.897			
09.898			
09.899		(6,6-Dimethylbicyclo[3.3.1]hept-2-en-2-yl)methyl 2-methylbutanoate	
09.900	Myrtenyl isovalerate	(6,6-dimethyl-bicyclo[3.1.1]hept-2-enyl)methyl isopentanoate	
09.903		3-Methylbut-2-enyl 3-methylbut-2-enoate	
09.914			
09.915			
09.916			
10.001	gamma-Nonalactone; 4-Hydroxynonanoic acid gamma-lactone; Aldehyde C-18 (so-called); Prunolide; gamma-Amyl butyrolactone; Nonanolide-1,4;		
10.002	gamma-Undecalactone; Aldehyde C-14 (so-called); gamma-Undecyl lactone; gamma-Heptyl butyrolactone; 1,4-Hendecanolide		
10.003	Ambrettolide; omega-6-hexadecenlactone; 16-Hydroxy-7-hexadecenoic acid lactone; Cyclohexadecen-7-olide; 6-Hexadecenolide		5
10.004	Exaltolide; omega-pentadecalactone; Angelica lactone; Muscolactone; 15-Hydroxytetradecanoic acid lactone; 1,15-epoxypentadecan-1-one; Cyclopentadecanolide; 15-Pentadecanolide		
10.005			
10.006	4-Hydroxybutanoic acid lactone; gamma-butyrolactone; 1,4-Epoxy butan-1-one; 2-Oxo oxolen; Dihydro-2-(3H) furanone; 3 (or 4)-hydroxybutyric acid, lactone; 1,2-butanolide;		
10.007	delta-Decalactone; Decanolide-1,5; Amyl-delta-valerolactone; delta-n-Amyl-delta-valerolactone;		
10.008	delta-Dodecalactone; n-Heptyl-delta-valerolactone; 5-Hydroxydodecanoic acid delta-lactone; delta-Heptyl-delta-valerolactone; Dodecanolide-1,5		
10.009	gamma-Dodecen-6-lactone; 4-Hydroxy-6-dodecenoic acid lactone; Dihydro-5(2-octenyl)-2(3H)-furanone; cis-6-Dodecen-4-olide;		5
10.010	delta-hexalactone; 5-Hydroxyhexanoic acid lactone; delta-Caprolactone; 5-Methyl-d-valerolactone; 5-Methyl-5-Hydroxypentanoic acid lactone;		
10.011	5-Hydroxyundecanoic acid lactone; Undecanolide-1,5; alpha-n-hexyl-delta-valerolactone; 5-n-Hexyl-5-hydroxypentanoic acid lactone;		
10.012	4-Hydroxy-3-pentenoic acid lactone; Pent-3-en-1,4-lactone; beta-gamma-Angelica lactone; 5-Methyl-2-(3H)furanone; gamma-Methyl-beta-butenolide;		
10.013	gamma-Valerolactone; 4-Hydroxypentanoic acid lactone; gamma-Methyl-gamma-butyrolactone; gamma-Pentalactone; 4-Valerolactone; 4-Pentanolide;		
10.014	delta-Nonalactone; 5-Hydroxynonanoic acid lactone; Nonanolide-1,5; n-Butyl-delta-valerolactone;		
10.015	5-Hydroxyoctanoic acid lactone; delta-Octalactone; Tetrahydro-6-propyl-5-hydroxy-2H-pyran-2-one		
10.016	delta-Tetradecalactone; 5-Hydroxytetradecanoic acid lactone; 2H-Pyran-2-one, Tetrahydro-6-nonyl-;		
10.017	gamma-Decalactone; gamma-n-Decalactone; Decanolide-1,4; gamma-n-Hexyl-gamma-butyrolactone;		
10.018	4,4-Dibutyl-4-hydroxybutyric acid, gamma-lactone; 4-Butyl-4-hydroxyoctanoic acid lactone;		
10.019	gamma-Dodecalactone; Dodecanolide-1,4; gamma-n-octyl-gamma-n-butyrolactone; Dodecanolide-1		
10.020	Heptanolide-1,4; gamma-Heptalactone; Heptanolide-(4,1); 4-Hydroxyheptanoic acid, gamma-lactone;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
10.021	09	695-06-7	Hexano-1,4-lactone	2556	2254	211-778-8
10.022	09	104-50-7	Octano-1,4-lactone	2796	2274	203-208-1
10.023	13	698-10-2	5-Ethyl-3-hydroxy-4-methylfuran-2(5H)-one	3153	2300	211-811-6
10.024	11	551-08-6	3-Butylidene-phthalide	3333	10083	208-991-3
10.025	11	6066-49-5	3-Butylphthalide	3334	10084	228-000-8
10.026	09	40923-64-6	3-Heptyldihydro-5-methyl-2(3H)-furanone	3350	10953	255-141-2
10.027	09	499-54-7	3,7-Dimethyloctano-1,6-lactone	3355	11833	207-882-8
10.028	09	16429-21-3	Dodecano-1,6-lactone	3610		240-483-7
10.029	09	5579-78-2	Decano-1,6-lactone	3613		226-963-9
10.030	13	28664-35-9	3-Hydroxy-4,5-dimethylfuran-2(5H)-one	3634	11834	249-136-4
10.031	09	27593-23-3	6-Pentyl-2H-pyran-2-one	3696	10967	248-552-3
10.033	09	34686-71-0	Dec-7-eno-1,5-lactone	3745		247-074-2
10.034	13	80417-97-6	5,6-Dihydro-3,6-dimethylbenzofuran-2(4H)-one	3755		279-462-2
10.035	09	68959-28-4	Undec-8-eno-1,5-lactone	3758		273-411-8
10.036	11	13341-72-5	5,6,7,7a-Tetrahydro-3,6-dimethylbenzofuran-2(4H)-one	3764		236-390-6
10.037	09	54814-64-1	Dec-2-eno-1,5-lactone	3744		259-359-9
10.038	09	67114-38-9	Dec-7-eno-1,4-lactone			
10.039	09	63095-33-0	cis-Dec-7-eno-1,4-lactone			263-852-4
10.040	09	32764-98-0	Dec-8-eno-1,5-lactone			251-201-7
10.041	13	10547-84-9	3,4-Dimethyl-5-pentylfuran-2(5H)-one			
10.042	13	774-64-1	3,4-Dimethyl-5-pentylidene-furan-2(5H)-one		11873	
10.043	09	74183-60-1	2,7-Dimethylocta-5(trans),7-dieno-1,4-lactone			
10.044	09	16400-72-9	Dodec-2-eno-1,5-lactone	3802		240-453-3
10.045	09	3301-90-4	Heptano-1,5-lactone		10660	221-972-4
10.046	13	2407-43-4	Hex-2-eno-1,4-lactone			219-304-1
10.047	09	109-29-5	Hexadecano-1,16-lactone			203-662-0
10.048	09	730-46-1	Hexadecano-1,4-lactone		10673	
10.049	09	7370-44-7	Hexadecano-1,5-lactone		10674	230-924-1
10.050	13	92015-65-1	Hexahydro-3,6-dimethyl-2(3H)-benzofuranone			
10.051	09	7011-83-8	5-Hexyl-5-methyldihydrofuran-2(3H)-one	3786		230-291-1
10.052	09	33673-62-0	3-Methylnonano-1,4-lactone			251-629-4
10.053	09	39212-23-2	3-Methyloctano-1,4-lactone	3803	10535	254-357-4
10.054	13	21963-26-8	Non-2-eno-1,4-lactone			244-685-6
10.055	09	542-28-9	Pentano-1,5-lactone		10907	208-807-1
10.056	11	87-41-2	Phthalide			201-744-0
10.057	11	57743-63-2	3a,4,5,7a-Tetrahydro-3,6-dimethylbenzofuran-2(3H)-one			
10.058	09	7370-92-5	Tridecano-1,5-lactone		10902	230-927-8
10.059	09	123-69-3	Hexadec-7-en-1,16-lactone			203-644-5
10.060	13	2518-53-8	2-Decen-1,4-lactone			219-742-3
10.061	13	70851-61-5	cis-5-Hexenyldihydro-5-methylfuran-2(3H)-one	3937		274-942-8
10.063	09	28645-51-4	Hexadec-9-en-1,16 lactone			249-120-7
10.065	13		2,3-Dimethylnon-2-eno-1,4-lactone			

FL No	Synonyms	Systematic name	Comments
10.021	gamma-Hexalactone; Hexanolide-1,4; gamma-Ethyl-n-butyrolactone; Tonkalide; gamma-Caprolactone; Ethyl butyrolactone;		
10.022	gamma-Octalactone; Octanolide-1,4; gamma-n-Butyl-gamma-butyrolactone		
10.023	Emoxyfuranone; 2,4-Dihydroxy-3-methyl-2-hexenoic acid, gamma lactone; 2-Ethyl-3-methyl-4-hydroxydihydro-2,5-furan-5-one;		
10.024			
10.025			
10.026	alpha-Heptyl-gamma-valerolactone; alpha-n-Heptyl-8-valerolactone;		
10.027	Menthane lactone; 6-Hydroxy-3,7-dimethyl caprylic acid, lactone; 4-Methyl-7-isopropyl-2-oxoepanone; Menthone lactone;		
10.028	epsilon-Dodecalactone; 7-Hexyl-2-oxepanone		
10.029	epsilon-Decalactone; 7-Butyl-2-oxepanone; 6-Butylhexanolide;		
10.030	2-Hydroxy-3-methylpent-2-en-1,4-lactone; 2,3-Dimethyl-4-hydroxy-2,5-dihydro-furan-5-on		
10.031	6-Pentyl-alpha-pyrone; 2H-Pyran-2-one, 6-pentyl-		
10.033	2H-Pyran-2-one, tetrahydro-6-(2-pentenyl)-, (Z); 7-Decen-5-olide;		
10.034	Dehydromenthofuranone; 2(4H)-Benzofuranone, 5,6-dihydro-3,6-dimethyl-, (R)-;		
10.035	5-Hydroxyundec-8-enoic acid delta lactone; 6-(3-Hexenyl)tetrahydro(2H)pyran-2-one; 2H-Pyran-2-one, 6-(3-hexenyl)tetrahydro-, (Z)-;		
10.036	2(4H)-Benzofuranone, 5,6,7,7a,-tetrahydro-3,6-dimethyl-; Dehydroxymenthofuranone;	Mintlactone	
10.037	Massoia lactone		
10.038			
10.039	(Z)-5-(3-hexenyl)dihydrofuran-2(3H)-one;		
10.040	tetrahydro-6-(3-pentenyl)-2H-pyran-2-one		
10.041			
10.042	Bovolide; 4-Hydroxy-2,3-dimethylnona-2,4-dienoic acid lactone		
10.043	Marmarolactone		
10.044	5-Hydroxy-2-dodecenoic acid lactone; Delta-2-dodecenolactone; 6-Heptyl-5,6-dihydro-2-pyrone; 5-Heptyl-2-pentene-5-olide		
10.045	6-Ethyltetrahydro-2H-pyran-2-one		
10.046	5-Ethyl-2(5H)-furanone; 5-ethylfuran-2(5H)-one		
10.047	Dihydroambrettolide; hexadecan-16-olide; oxacycloheptadecan-2-one		
10.048			
10.049	tetrahydro-6-undecyl-2H-pyran-2-one		
10.050			
10.051	Methyl gamma-decalactone; Dihydrojasmonone lactone; 5-hexyldihydro-5-methylfuran-2(3H)-one		
10.052	dihydro-4-methyl-5-pentylfuran-2(3H)-one		
10.053	beta-Methyl-gamma-octalactone; 4-Butyl-3-methyl-1,4-butyrolactone; 5-butyldihydro-4-methylfuran-2(3H)-one		
10.054	5-pentylfuran-2(5H)-one		
10.055	1,5-Valerolactone; delta-Valerolactone		
10.056	1(3H)-Isobenzofuranone	Benzofuran-2(5H)-one	
10.057			
10.058	tetrahydro-6-octyl-2H-pyran-2-one		
10.059	hexadec-7-en-16-olide ;Oxacycloheptadec-8-en-2-one, (Z)-;		
10.060	5-hexylfuran-2(5H)-one		
10.061	4-Hydroxy-4-methyldec-9-enoic acid lactone; (Z)-5-Hex-3-enyldihydro-5-methylfuran-2(3H)-one;		
10.063		Oxacyclo heptadec-10-en-2-one	
10.065			

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
10.066	13		Furan-2(5H)-one			
10.068	09		Pentadecano-1,14-lactone			
11.001	33	107-85-7	3-Methylbutylamine	3219	512	203-526-0
11.002	33	78-81-9	Isobutylamine		513	201-145-4
11.003	33	109-73-9	Butylamine	3130	524	203-699-2
11.004	33	107-10-8	Propylamine		601	203-462-3
11.005	33	13952-84-6	sec-Butylamine		707	237-732-7
11.006	33	64-04-0	Phenethylamine	3220	708	200-574-4
11.007	33	51-67-2	2-(4-Hydroxyphenyl)ethylamine		709	200-115-8
11.008	33	551-93-9	2-Aminoacetophenone	3906	2041	209-002-8
11.009	33	75-50-3	Trimethylamine	3241	10497	200-875-0
11.011	33	5331-48-6	N-Acetylpropylamine			226-231-9
11.012	33	109-89-7	Diethylamine		10470	203-716-3
11.013	33	124-40-3	Dimethylamine		10473	204-697-4
11.014	33	19342-01-9	N,N-Dimethylphenethylamine			242-976-2
11.015	33	75-04-7	Ethylamine		10477	200-834-7
11.016	33	111-26-2	Hexylamine		10478	203-851-8
11.017	33	35448-31-8	N-Isopentylidene isopentylamine			
11.018	33	75-31-0	Isopropylamine		10480	200-860-9
11.019	33	74-89-5	Methylamine		10483	200-820-0
11.020	33	96-15-1	2-Methylbutylamine		10484	202-483-5
11.021	33	110-58-7	Pentylamine		11734	203-780-2
11.022	33	102-82-9	Tributylamine			203-058-7
11.023	33	121-44-8	Triethylamine		10496	204-469-4
11.024	33	593-81-7	Trimethylamine hydrochloride			209-810-0
11.025	33	1184-78-7	Trimethylamine oxide		10494	214-675-6
11.026	33	102-69-2	Tripropylamine		10495	203-047-7
12.001	20	3268-49-3	3-(Methylthio)propionaldehyde	2747	125	221-882-5
12.002	20	13532-18-8	Methyl 3-(methylthio)propionate	2720	428	236-883-6
12.003	20	74-93-1	Methanethiol	2716	475	200-822-1
12.004	20	870-23-5	Allylthiol	2035	476	212-792-7
12.005	20	100-53-8	Phenylmethanethiol	2147	477	202-862-5
12.006	20	75-18-3	Dimethyl sulfide	2746	483	200-846-2
12.007	20	544-40-1	Dibutyl sulfide	2215	484	208-870-5
12.008	20	2179-57-9	Diallyl disulfide	2028	485	218-548-6
12.009	20	2050-87-5	Diallyl trisulfide	3265	486	218-107-8
12.010	20	109-79-5	Butane-1-thiol	3478	526	203-705-3
12.011	20	1569-69-3	Cyclohexanethiol		529	216-378-7
12.012	20	110-81-6	Diethyl disulfide		533	203-805-7
12.013	20	3658-80-8	Dimethyl trisulfide	3275	539	222-910-9
12.014	20	629-19-6	Dipropyl disulfide	3228	540	211-079-8
12.015	20	111-47-7	Dipropyl sulfide		541	203-873-8
12.016	20	625-80-9	Di-isopropyl sulfide		542	210-911-7
12.017	20	75-08-1	Ethanethiol		546	200-837-3
12.018	20	625-60-5	S-Ethyl acetothioate	3282	11665	210-904-9
12.019	20	2179-60-4	Methyl propyl disulfide	3201	585	218-551-2

FL No	Synonyms	Systematic name	Comments
10.066	But-2-en-1,4-lactone		
10.068			
11.001	Isoamylamine; isoPentylamine; 1-Butanamine, 3-methyl-		
11.002		2-Methylpropylamine	
11.003	1-Aminobutane		
11.004			
11.005	But-2-ylamine	1-Methylpropylamine	
11.006	1-Amino-2-phenylethane; 2-Aminoethylbenzene; 2-Phenylethylamine		
11.007	Tyramine; 4-(2-aminoethyl)phenol; 4-Hydroxy-phenylethylamine; Tyrosamine;		
11.008	1-Acetyl-2-aminobenzene; o-Acetylaniline; 2-Acetylphenylamine; o-Aminoacetophenone; 2-Aminophenyl methyl ketone		
11.009	N,N-Dimethylmethylamine		
11.011	N-Propylacetamide		
11.012	N-Ethylethylamine		
11.013			
11.014			
11.015			
11.016			
11.017		N-(3-Methylbutylidene)-3-methyl-1-butylamine	
11.018		2-Aminopropane;	
11.019			
11.020			
11.021	Amylamine		
11.022			
11.023	N, N-diethylethylamine		
11.024			
11.025	trimethylamine N-oxide dihydrate		
11.026			
12.001	Methional; 3-(Methylthio)propanal; Methylmercaptopropionaldehyde; beta-Methiopropionaldehyde;		
12.002	Methyl beta-Methylmercapto propionate; Methyl beta-Methiopropionate;		
12.003	Methylmercaptan; Thiomethyl alcohol; Methyl sulfhydrate; Mercaptomethane;		
12.004	2-Propene-1-thiol; 2-Propene-1-thiol; Allyl sulfhydrate;		
12.005	Benzylmercaptan; alpha-Mercaptotoluene; alpha-Toluenethiol; Benzyl hydrosulfide; Benzylthiol; Thiobenzyl alcohol;		
12.006	Methylsulfide; 2-Thiapropane;		
12.007	Butylsulfide; Di-n-butyl sulphide; Butylthiobutane		
12.008	Allyl disulfide; 2-Propenyl disulphide		
12.009	Allyl trisulfide; Prop-2-enyl-trithio prop-2-ene; Allyl trisulphide		
12.010	n-Butyl mercaptan		
12.011	Cyclohexyl mercaptan		
12.012			
12.013	Methyl trisulfide; Methyl trithio methane; Methyl trisulphide		
12.014	Propyl disulfide; Propyldithiopropene		
12.015			
12.016			
12.017	Ethyl mercaptan		
12.018	Ethyl thioacetate; Acetic acid thio ethyl; Ethanethioic acid, S-ethyl ester; Acetic acid, thioethyl ester;		
12.019	Propyl methyl disulfide; Methyl dithio propane; Methyl dithiopropene		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
12.020	20	17619-36-2	Methyl propyl trisulfide	3308	586	241-594-3
12.021	20	2179-59-1	Allyl propyl disulfide		600	218-550-7
12.022	20	4532-64-3	Butane-2,3-dithiol	3477	725	224-870-8
12.023	20	6028-61-1	Dipropyl trisulfide	3276	726	227-903-4
12.024	20	37887-04-0	3-Mercaptobutan-2-ol	3502	760	253-701-0
12.025	30	57-06-7	Allyl isothiocyanate	2034	2110	200-309-2
12.026	20	624-92-0	Dimethyl disulfide	3536	2175	210-871-0
12.027	20	137-06-4	2-Methylbenzene-1-thiol	3240	2272	205-276-8
12.028	20	2550-40-5	Dicyclohexyl disulfide	3448	2320	219-851-6
12.029	20	1679-07-8	Cyclopentanethiol	3262	2321	216-841-3
12.030	30	505-79-3	3-(Methylthio)propyl isothiocyanate	3312	2326	208-020-3
12.031	20	67633-97-0	3-Mercaptopentan-2-one	3300	2327	266-799-5
12.032	20	2432-51-1	S-Methyl butanethioate	3310	2328	219-407-1
12.033	20	91-60-1	Naphthalene-2-thiol	3314	2330	202-082-5
12.034	20	1191-62-4	Octane-1,8-dithiol	3514	2331	214-738-8
12.035	20		2-,3- and 10-Mercaptopinane	3503	2332	2459006
12.036	20	54957-02-7	3-[(2-Mercapto-1-methylpropyl)thio]butan-2-ol	3509	2353	
12.037	20	2179-58-0	Allyl methyl disulfide	3127	11866	218-549-1
12.038	20	38462-22-5	8-Mercapto-p-menthan-3-one	3177	11789	253-953-1
12.039	20	79-42-5	2-Mercaptopropionic acid	3180	11790	201-206-5
12.040	20	23328-62-3	2-Methylthioacetaldehyde	3206	11686	245-587-6
12.041	20	13678-58-5	1-(Methylthio)butan-2-one	3207	11543	237-169-7
12.042	20	1073-29-6	2-(Methylthio)phenol	3210	11553	214-027-2
12.043	20	882-33-7	Diphenyl disulfide	3225	11757	212-926-4
12.044	20	5905-46-4	Prop-1-enyl propyl disulfide	3227	11699	227-604-9
12.045	20	34135-85-8	Methyl allyl trisulfide	3253	11867	251-843-8
12.046	20	19788-49-9	Ethyl 2-mercaptopropionate	3279	11469	243-314-5
12.047	20	40789-98-8	3-Mercaptobutan-2-one	3298	11497	255-082-2
12.048	20	1878-18-8	2-Methylbutane-1-thiol	3303	11509	217-515-3
12.049	20	2084-18-6	3-Methylbutane-2-thiol	3304	11510	218-223-9
12.052	20	40790-04-3	Di-(3-oxobutyl) sulfide	3335	11441	
12.053	20	13327-56-5	Ethyl 3-(methylthio)propionate	3343	11476	236-370-7
12.054	20	4500-58-7	2-(Ethylthio)phenol	3345	11666	224-811-6
12.055	20	34619-12-0	4-Mercaptobutan-2-one	3357	11498	
12.056	20	16630-52-7	3-(Methylthio)butanal	3374	11687	240-678-7
12.057	20	34047-39-7	4-(Methylthio)butan-2-one	3375	11688	251-810-8
12.058	20	23550-40-5	4-(Methylthio)-4-methylpentan-2-one	3376	11551	245-727-6
12.059	20	2307-10-0	Propyl thioacetate	3385	11576	218-984-7
12.060	20	53053-51-3	Methyl 4-(methylthio)butyrate	3412	11526	258-328-7
12.061	20	42919-64-2	4-(Methylthio)butanal	3414	11542	256-001-3
12.062	20	505-10-2	3-(Methylthio)propan-1-ol	3415	11554	208-004-6
12.063	20	51755-66-9	3-(Methylthio)hexan-1-ol	3438	11548	257-380-8
12.064	20	39067-80-6	Thiogeraniol	3472	11583	254-269-6
12.065	20	59902-01-1	2,8-Dithianon-4-en-4-carboxaldehyde	3483	11904	261-978-4

FL No	Synonyms	Systematic name	Comments
12.020	Propyl methyl trisulfide; Methyl trithio propane; Propyl methyl trisulphide		
12.021			
12.022	2,3-Dimercaptobutane		
12.023	Propyl trisulfide; Propyl trithio propane; Propyl trisulphide		
12.024	2-Hydroxy-3-butanethiol; 3-Hydroxy-2-butanethiol; 3-Mercapto-2-butanol;		
12.025	3-Isothiocyanatopropene; 2-Propenyl isothiocyanate; AITC; Isothiocyanic acid, allyl ester; 2-Propenyl isothiocyanate; Allyl isosulfocyanate; Allyl thiocarbonylimide;		
12.026	Methyl disulfide; Methyl disulphide		
12.027	o-Toluenethiol; 2-Methylthiophenol; o-Tolylmercaptan;		
12.028	Cyclohexyl disulphide		
12.029	Cyclopentyl mercaptan		
12.030	3-Methylmercaptopropyl isothiocyanate; Isothiocyanic acid, 3-(methylthio)propyl ester;		
12.031			
12.032	Methyl thiobutyrate; Methanethiol n-Butyrate; Thiobutyric acid, methyl ester;		
12.033	beta-Thionaphthol; 2-Mercaptanaphthalene; 2-Naphthyl mercaptan; 2-Thionaphthol;		
12.034	1,8-Dimercaptooctane; Octamethylene dimercaptan		
12.035	Pinanethiol; Pinanyl mercaptan	2,6,6 Trimethyl-bicyclo[3.1.1]heptane-(2,3 and 10)-thiol	
12.036	alpha-Methyl-beta-hydroxypropyl alpha-methyl-beta-mercaptopropyl sulfide; 2-Butanol, 3-[(2-mercapto-1-methylpropyl)thiol-;		
12.037	Methyl allyl disulphide		
12.038	8-Mercaptomenthone; Thiomenthone;		
12.039	Thiolactic acid; alpha-Mercaptopropionic acid; 2-Thiolpropionic acid;		
12.040	Methyl mercapto aldehyde; Methylmercapto acetaldehyde		
12.041			
12.042	1-Hydroxy-2-methylmercaptobenzene; 2-Methylmercaptophenol;		
12.043	Phenyl disulfide; Biphenyl disulfide; Phenylthiobenzene;		
12.044	Propyl propenyl disulfide		
12.045	Methyl allyl trisulphide		
12.046	Ethyl thiolactate; 2-Mercapto propionic acid, ethyl ester;		
12.047			
12.048	Amyl mercaptan; 2-Methylbutyl mercaptan; Thioamyl alcohol		
12.049	sec-Isoamylmercaptan		
12.052	bis(Butan-3-one-1-yl) sulfide		
12.053	Ethyl-beta-methylthiopropionate		
12.054	2-Ethylphenyl mercaptan; 2-Ethylbenzenethiol;		
12.055	2-Keto-4-butanethiol;		
12.056	3-Methyl thio butyraldehyde; 3-Methyl propanethiol; Thio isoamyl aldehyde; Thio isovaleraldehyde		
12.057	(4-Methyl)-thio-2-butanone; Methyl propyl thioketone; 4-Methyl-2-butane-thione; 2-Pentane thione		
12.058			
12.059	Ethanethioic acid, S-propyl ester; Acetic acid, thiopropyl ester;		
12.060	Methyl gamma-methyl mercapto butyrate;		
12.061	4-(Methylmercapto)butanal		
12.062	Methionol; gamma-Hydroxypropyl methyl sulfide; 3-Methylthio propyl alcohol; Methyl 3-hydroxypropyl sulfide;		
12.063	3-Methylmercapto-1-hexanol		
12.064	3,7-Dimethyl-2,6-octadien-1-thiol	3,7-Dimethyl-2(trans),6-octadiene-1-thiol	
12.065	5-(Methylthio)-2-(methyl-thio)methylpent-2-en-1-al;	5-Methylthio-2-[(methylthio)methyl]pent-2-enal	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
12.066	20	540-63-6	Ethane-1,2-dithiol	3484	11467	208-752-3
12.067	20	1191-43-1	Hexane-1,6-dithiol	3495	11486	214-735-1
12.068	20	699-10-5	Benzyl methyl disulfide	3504	11508	211-826-8
12.069	20	3489-28-9	Nonane-1,9-dithiol	3513	11558	222-482-3
12.070	20	814-67-5	Propane-1,2-dithiol	3520	11564	212-398-5
12.071	20	107-03-9	1-Propane-1-thiol	3521	11816	203-455-5
12.072	20	16128-68-0	Butane-1,2-dithiol	3528	11909	240-290-8
12.073	20	24330-52-7	Butane-1,3-dithiol	3529	11910	246-172-2
12.074	20	72869-75-1	Diallyl polysulfides	3533	11912	
12.075	20	5905-47-5	Methyl prop-1-enyl disulfide	3576	11712	227-605-4
12.076	20	109-80-8	Propane-1,3-dithiol	3588	11929	203-706-9
12.077	20	766-92-7	Benzyl methyl sulfide	3597		212-174-7
12.078	20	20582-85-8	4-(Methylthio)butan-1-ol	3600		
12.079	20	40878-72-6	2-(Methylthiomethyl)but-2-enal	3601	11549	255-126-0
12.080	20	108-98-5	Thiophenol	3616	11585	203-635-3
12.081	20	150-60-7	Dibenzyl disulfide	3617		205-764-0
12.082	20	118-72-9	2,6-(Dimethyl)thiophenol	3666		204-272-3
12.083	20	5466-06-8	Ethyl 3-mercaptopropionate	3677		226-771-5
12.084	20	22014-48-8	Ethyl 4-(methylthio)butyrate	3681		244-720-5
12.085	20	71159-90-5	p-Menth-1-ene-8-thiol	3700		275-223-1
12.086	20	51534-66-8	Methyl 2-(methylthio)butyrate	3708		255-648-9
12.087	20	65887-08-3	2-(Methylthiomethyl)-3-phenylpropenal	3717		
12.088	20	592-88-1	Diallyl sulfide	2042	11846	209-775-1
12.089	20		Ethyl 3-(methylthio)butyrate	3836	11475	
12.090	20		Propyl methanethiosulfinate		11571	
12.091	20	6588-78-9	10-Mercaptopinane	3503	2332	229-520-8
12.092	20		Diallyl pentasulfide	3533	11912	
12.093	20		Diallyl hexasulfide	3533	11912	
12.094	20		Diallyl heptasulfide	3533	11912	
12.096	20	10152-76-8	Allyl methyl sulfide		11429	233-422-0
12.097	20	90195-83-8	Allyl methyl tetrasulfide			
12.098	20	33368-82-0	Allyl prop-1-enyl disulfide		11433	
12.099	20	33922-70-2	Allyl propyl sulfide		11434	
12.100	20	33922-73-5	Allyl propyl trisulfide		11435	
12.101	20	41820-22-8	Allyl thiopropionate	3329	11436	
12.102	30	622-78-6	Benzyl isothiocyanate		11863	210-753-9
12.103	20	1191-08-8	Butane-1,4-dithiol			214-728-3
12.104	20	513-53-1	Butane-2-thiol			208-165-2
12.105	20	34322-09-3	S-2-Butyl 3-methylbut-2-enethioate			251-938-4
12.106	20	2432-91-9	S-2-Butyl 3-methylbutanethioate			219-416-0
12.107	30	592-82-5	Butyl isothiocyanate		11488	209-770-4
12.108	20	68084-03-7	Di-isopentyl thiomalate		11454	268-416-7
12.109	20	4253-89-8	Di-isopropyl disulfide	3827	11455	224-225-0
12.110	20	2444-49-7	Diallyl tetrasulfide		11449	219-485-7
12.111	20	629-45-8	Dibutyl disulfide			211-091-3
12.112	20	5943-31-7	Dibutyl trisulfide			

FL No	Synonyms	Systematic name	Comments
12.066	Dithioglycol; 1,2-Dimercaptoethane; Ethylene dithioglycol; Ethylene mercaptan		
12.067	1,6-Dimercaptohexane; Hexamethylene dimercaptan		
12.068	Benzylthiomethane; Methyl phenylmethyl disulfide;		
12.069	1,9-Dimercaptononane; Nonamethylene dimercaptan		
12.070	1,2-Dimercaptopropane		
12.071	Propyl mercaptan; n-Thiopropyl alcohol; Propylthiol		
12.072	1,2-Dimercaptobutane		
12.073	1,3-Dimercaptobutane		
12.074	2-Propenyl polysulfides; Diallyl di-, tri-, tetra-, and pentasulfides		
12.075	1-Propenyl methyl disulphide; Methylthio-1-propene;		
12.076	1,3-Dimercaptopropane; Trimethylene dimercaptan		
12.077	Sulfide, benzyl methyl; Methylthiomethyl benzene;		
12.078			
12.079	2-Ethylidene methional		
12.080	Benzenethiol; Phenyl mercaptan		
12.081	1,4-Diphenyl-2,3-dithiobutane; alpha-Benzylthio toluene		
12.082	2,6-Dimethylbenzenethiol; 2,6-Xylenethiol		
12.083	Ethyl 3-thiopropionate;		
12.084			
12.085	alpha,alpha,4-Trimethyl-3-cyclohexene-1-methanethiol		
12.086	Methylthio 2-methylbutyrate	Butanethioic acid, 2-methyl, S-methyl ester;	
12.087	alpha-Benzylidenemethional; 2-Propenal, 2-(methylthiomethyl)-3-phenyl-;		
12.088	Allyl sulfide; 2-Propenyl sulphide; Thioallyl ether		
12.089			
12.090			
12.091		2,6,6 Trimethyl-bicyclo[3.1.1]heptane-10-thiol	5
12.092			
12.093			
12.094			
12.096			
12.097			
12.098			
12.099	(2- Propenyl)thiopropane		
12.100			
12.101			
12.102	2- Isothiocyanatotoluene		
12.103	1,4-Butanedithiol		
12.104	2-Butanethiol		
12.105	sec-butyl 3-methyl-2-butenethioate		
12.106			
12.107	4-Isothiocyanato-but-1-ene		
12.108	bis(3-methylbutyl) mercaptosuccinate	Di(3-methylbutyl) but-2(cis)-enebis(thioate)	
12.109	Disulfide, bis(1-methylethyl); Isopropyl disulfide; 2,5-Dimethyl-3,4-dithiohexane; Bis(1-methylethyl)disulfide		
12.110			
12.111			
12.112			

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
12.113	20	352-93-2	Diethyl sulfide	3825	11450	206-526-9
12.114	20	3600-24-6	Diethyl trisulfide		11451	222-754-1
12.115	20	420-12-2	Diethylene sulfide			206-993-9
12.116	20	5756-24-1	Dimethyl tetrasulfide		11459	227-278-8
12.117	20	872-10-6	Dipentyl sulfide			212-820-8
12.118	20	1618-26-4	2,4-Dithiapentane	3878		216-577-9
12.119	20	112-55-0	Dodecyl mercaptan			203-984-1
12.120	20	68398-18-5	2,8-Epithio-p-menthane			269-970-2
12.121	20	23747-43-5	Ethyl 2-(methylthio)propionate	3834	11471	245-862-0
12.122	20	4455-13-4	Ethyl 2-(methylthio)acetate	3835		224-700-2
12.124	20	638-46-0	Ethyl butyl sulfide			
12.125	20	2432-42-0	Ethyl propanethioate			219-405-0
12.126	20	30453-31-7	Ethyl propyl disulfide		11478	
12.127	20	4110-50-3	Ethyl propyl sulfide		11479	223-890-4
12.128	20	7341-17-5	2-Ethylhexane-1-thiol	3833		230-854-1
12.129	20	18721-61-4	3-(Ethylthio)propan-1-ol			242-534-9
12.130	20	1639-09-4	Heptane-1-thiol		11485	216-678-8
12.131	20	2917-26-2	Hexadecane-1-thiol			220-846-6
12.132	20	111-31-9	Hexane-1-thiol	3842	11487	203-857-0
12.133	20	93762-35-7	Isopentyl 3-(methylthio)propionate			297-748-5
12.134	20	34365-79-2	S-Isopropyl 3-methylbut-2-enethioate			251-966-7
12.135	20	26473-47-2	3-Mercapto-2-methylpropionic acid			247-726-6
12.136	20	2464-23-5	3-Mercapto-2-oxopropionic acid			
12.137	20	34300-94-2	3-Mercapto-3-methylbutan-1-ol	3854		
12.138	20	50746-10-6	3-Mercapto-3-methylbutyl formate	3855		
12.139	20	7217-59-6	2-Mercaptoanisole		11880	230-605-7
12.140	20	17042-24-9	2-Mercaptopentan-3-one			
12.141	20	23832-18-0	2-Mercaptopinane	3503	2332	245-900-6
12.142	20	72361-41-2	3-Mercaptopinane	3503	2332	276-598-4
12.143	20	24653-75-6	1-Mercaptopropan-2-one	3856		
12.144	20	107-96-0	3-Mercaptopropionic acid		11709	203-537-0
12.145	20	94087-83-9	4-Methoxy-2-methylbutane-2-thiol	3785		301-977-9
12.146	20	16630-66-3	Methyl (methylthio)acetate		11525	240-683-4
12.148	20	61122-71-2	S-Methyl 4-methylpentanethioate	3867		
12.149	20	1534-08-3	S-Methyl acetothioate	3876		216-252-1
12.150	20	5925-68-8	S-Methyl benzothioate	3857	11505	227-656-2
12.151	20	60779-24-0	Methyl butyl disulfide			
12.152	20	628-29-5	Methyl butyl sulfide			211-034-2
12.153	20	20333-39-5	Methyl ethyl disulfide		11470	
12.154	20	624-89-5	Methyl ethyl sulfide	3860	11474	210-868-4

FL No	Synonyms	Systematic name	Comments
12.113	Ethyl thioethane; Ethane, 1,1-thiobis-; Ethyl sulfide; 1,1-Thiobisethane; 3-Thiopentane; Diethylthioether		
12.114			
12.115			
12.116			
12.117			
12.118	Formaldehyde dimethyl mercaptal; bis[methylmercapto]methane; Formaldehyde dimethyl dithioacetal		
12.119	Dodecane-1-thiol	Dodecane-1-thiol	
12.120			
12.121	Ethyl alpha-(methylthio)propionate		
12.122	Ethyl (methylthio)acetate; Ethyl 2-methylthioacetate		
12.124			
12.125	S-ethyl propanethioate		
12.126	Ethyl dithiopropane		
12.127			
12.128			
12.129	3-(ethylthio)propanol		
12.130	Heptyl mercaptan		
12.131			
12.132	Hexyl mercaptan		
12.133		3-Methylbutyl 3-(methylthio)propanoate;	5
12.134	S-Isopropyl thiosenecioate; S-isopropyl 3-methylthiocrotonate		
12.135	3- Mercaptoisobutyric acid;		
12.136			
12.137	1-Butanol, 3-mercapto-3-methyl-; 3-Methyl-3-mercaptobutyl alcohol; 3-Mercapto-3-methylbutyl alcohol		
12.138	3-Methyl-3-thiobutyl formate; 1-Butanol, 3-mercapto-3-methyl, formate ester; 3-Methyl-3-mercaptobutyl formate		
12.139	Thioguaiacol; 2-Methoxythiophenol; 2-Methoxybenzenethiol	2-Methoxybenzene-1-thiol	
12.140			
12.141	pinane-2-thiol;	2,6,6 Trimethyl-bicyclo[3.1.1]heptane-2-thiol	5
12.142		2,6,6 Trimethyl-bicyclo[3.1.1]heptane-3-thiol	5
12.143	Mercaptoacetone		
12.144			
12.145			
12.146			
12.148			
12.149			
12.150	Methane thiobenzoate; S-Methyl thiobenzoate; Methanethiol, benzoate		
12.151			
12.152			
12.153			
12.154	(Methylthio)ethane; Sulfide, ethyl methyl; 1-(Methylthio)ethane; 2-Thiobutane; Ethyl methyl thioether		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
12.155	20	31499-71-5	Methyl ethyl trisulfide	3861		
12.156	20	20756-86-9	S-Methyl hexanethioate	3862	11515	
12.157	20	23747-45-7	S-Methyl isopentanethioate	3864	11506	245-863-6
12.158	20	5897-45-0	Methyl isoprenyl sulfide			
12.159	20	2949-92-0	Methyl methanethiosulfonate		11520	220-970-0
12.160	20	42075-43-4	S-Methyl pentanethioate			
12.161	20	14173-25-2	Methyl phenyl disulfide	3872	11532	238-020-9
12.162	20	100-68-5	Methyl phenyl sulfide	3873	11533	202-878-2
12.163	20	10152-77-9	Methyl prop-1-enyl sulfide		11538	
12.164	20	33368-80-8	Methyl prop-1-enyl trisulfide		11539	
12.165	20	5925-75-7	S-Methyl propanethioate			
12.166	20	3877-15-4	Methyl propyl sulfide		11541	223-403-5
12.167	20	87148-08-1	Methyl propyl tetrasulfide			289-302-3
12.168	20	67952-60-7	2-Methyl-2-(methylthio)propanal	3866		267-914-1
12.169	20	19872-52-7	2-Methyl-4-oxopentane-2-thiol		11500	243-386-8
12.170	20	5287-45-6	3-Methylbut-2-ene-1-thiol	3896	11511	
12.171	20	541-31-1	3-Methylbutane-1-thiol	3858		208-774-3
12.172	20	1679-09-0	2-Methylbutane-2-thiol			216-843-4
12.173	20	513-44-0	2-Methylpropane-1-thiol		11536	208-162-6
12.174	20	75-66-1	2-Methylpropane-2-thiol		11537	200-890-2
12.175	20	67-68-5	Methylsulfynylmethane	3875		200-664-3
12.176	20	583-92-6	4-(Methylthio)-2-oxobutyric acid	3881		
12.177	20	32637-94-8	8-(Methylthio)-p-menthan-3-one			
12.178	20	16630-65-2	3-(Methylthio)butyric acid			240-682-9
12.179	20	5271-38-5	2-(Methylthio)ethan-1-ol		11545	226-090-3
12.180	20	31331-53-0	1-(Methylthio)ethane-1-thiol			
12.181	20	66735-69-1	1-(Methylthio)pentan-3-one			
12.182	20	58809-73-7	2-(Methylthio)propionic acid			261-450-3
12.183	20	646-01-5	3-(Methylthio)propionic acid			211-460-9
12.184	20	84559-98-8	3-(Methylthio)propyl 3-methylbutyrate			283-185-2
12.185	20	16630-60-7	3-(Methylthio)propyl butyrate			240-680-8
12.186	30	4104-45-4	3-(Methylthio)propylamine			223-875-2
12.187	20	74758-93-3	Methylthiomethyl butyrate	3879		277-989-2
12.188	20	74758-91-1	Methylthiomethyl hexanoate	3880		277-988-7
12.189	20	77974-85-7	S-(Methylthiomethyl) 2-methylpropanethioate			
12.190	20	25103-58-6	2,4,4,6,6-Pentamethylheptane-2-thiol			246-619-1
12.191	20	110-66-7	Pentane-1-thiol			203-789-1
12.192	20	2084-19-7	Pentane-2-thiol	3792		218-224-4
12.193	30	2257-09-2	Phenethyl isothiocyanate		11495	218-855-5
12.194	20	4410-99-5	2-Phenylethane-1-thiol	3894	11561	224-563-9
12.195	20	33049-93-3	S-Prenyl thioacetate	3895		
12.196	20	53626-94-1	S-Prenyl thioisobutyrate			
12.197	20	75-33-2	Propane-2-thiol	3897	11565	200-861-4

FL No	Synonyms	Systematic name	Comments
12.155	2,3,4-Trithiohexane; Ethyl methyl trisulfide		
12.156			
12.157	Methane thioisopentanoate;	S-methyl 3-methylbutanethioate	
12.158		2-Methyl-1-methylthio-1,3-butadiene	
12.159			
12.160			
12.161	Phenyl methyl disulfide		
12.162	Thioanisole; Benzene, (methylthio)-; Sulfide, methyl phenyl-; 1-Phenyl-1-thioethane; Methyl phenyl thioether		
12.163			
12.164			
12.165			
12.166			
12.167			
12.168	2-Methyl-2-(methylthio)propionaldehyde; 2-(Methylthio)isobutyraldehyde		
12.169	4- Mercapto-4-methylpentan-2-one		
12.170			
12.171	Isoamyl mercaptan;		
12.172			
12.173	Isobutyl mercaptan		
12.174	tert-Butylmercaptan		
12.175	Dimethyl-sulfoxide-(INN); Methyl sulfoxide; Dimethyl sulfoxide; DMSO		
12.176			
12.177			
12.178			
12.179	2-(methylthio)ethanol; 2-hydroxyethyl methyl sulfide		
12.180			
12.181			
12.182			
12.183			
12.184	3-(methylthio)propyl isovalerate		
12.185			
12.186			
12.187			
12.188			
12.189			
12.190	Tert-dodecyl mercaptan; tert-dodecylthiol		5
12.191	1-Pentanethiol		
12.192	sec-Amylmercaptan; 1-Methylbutanethiol; 2-Mercaptopentane		
12.193			
12.194			
12.195	Ethanethioic acid, S-(3-methyl-2-buten-1-yl) ester; Thioacetic acid, S-(3-methyl-but-2-en-1-yl) ester	3-Methylbut-2-enyl acetothioate	
12.196		S-(3-Methylbut-2-enyl) 2-methylpropane-thioate	
12.197	Isopropyl mercaptan		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
12.198	20		2,3,5-Trithiahexane			
12.199	20	507-09-5	Ethanedithioic acid			208-063-8
12.200	20	14252-42-7	1,1-bis(Ethylthio)-ethane			
12.201	20	57074-34-7	8-Acetylthio-p-menthanone-3	3809		304-949-4
12.203	20	74586-09-7	Methylthio 2-(acetyloxy)propionate	3788		277-931-6
12.204	20	623-51-8	Ethyl 2-mercaptoacetate			210-800-3
12.205	20	4124-63-4	Meraptoacetaldehyde			223-929-5
12.211	20		But-1-enyl methyl sulphide	3820		
12.212	20		Ethyl-5-(methylthio)valerate			
12.213	20		S-Ethyl benzothioate			
12.214	20	127931-21-9	Isobutyl-3-(methylthio)butyrate			
12.215	20		S-Isopropyl-3-methylbutanethioate			
12.217	20		3-Mercaptohexan-1-ol	3850		
12.218	20		Methyl-3-methyl-1-butenyl disulphide	3865		
12.219	20		5-Methylthio-2-(methylthio)methylpent-2-enal			
12.220	20		2,2,4,6,6-Pentamethylheptane-4-thiol			
12.221	20		S-Prenyl thioisopentanoate			
12.225	20		Ethyl 3-methylthio-2-methylpropanoate			
12.227	20		Methylthio-2-(propionyloxy)propionate	3790		
12.229	20		3-Mercapto-2-methyl butyl formate			
12.234	20	136954-20-6	3-Mercaptohexyl acetate	3851		
12.235	20	136954-21-7	3-Mercaptohexyl butyrate	3852		
12.236	20	51755-85-2	3-(Methylthio)hexyl acetate	3789		
12.237	20	16630-55-0	3-(Methylthio)propyl acetate	3883		240-679-2
13.001	14	620-02-0	5-Methylfurfural	2702	119	210-622-6
13.002	14	611-13-2	Methyl 2-furoate	2703	358	210-254-6
13.003	14	615-10-1	Propyl 2-furoate	2946	359	210-407-7
13.004	03	4208-49-5	Allyl 2-furoate	2030	360	224-128-3
13.005	14	39251-86-0	Hexyl 2-furoate	2571	361	254-377-3
13.006	14	7149-32-8	Phenethyl 2-furoate	2865	362	
13.007	13	3208-40-0	2-(3-Phenylpropyl)tetrahydrofuran	2898	489	221-715-6
13.009	11	119-84-6	3,4-Dihydrocoumarin	2381	535	204-354-9
13.010	13	3658-77-3	4-Hydroxy-2,5-dimethylfuran-3(2H)-one	3174	536	222-908-8
13.011	14	623-20-1	Ethyl furfuracrylate		545	210-778-5
13.012	11	92-48-8	6-Methylcoumarin	2699	579	202-158-8

FL No	Synonyms	Systematic name	Comments
12.198			
12.199	Thioacetic acid		
12.200	Acetaldehyde diethyl mercaptal		
12.201			
12.203			
12.204			
12.205	2-Mercaptoethanal		
12.211			
12.212			
12.213			
12.214		2-Methylpropyl 3-(methylthio)butanoate	
12.215	S-Isopropyl thioisopentanoate		
12.217	3-Thiohexanol; 3-Thiohexan-1-ol		
12.218			
12.219			
12.220			
12.221		3-Methylbut-2-enyl 3-methylbutanethioate	
12.225			
12.227			
12.229			
12.234			
12.235			
12.236			
12.237	3-Acetoxypropyl methyl sulfide; 1-Propanol, 3-(methylthio)-, acetate; Methionyl acetate		
13.001	5-Methyl-2-furaldehyde	5 Methyl-2-furaldehyde	
13.002	Methyl furoate; Methyl pyromucate; Furan-alpha-carboxylic acid, methyl ester; Methyl pyromucate,		
13.003	Propyl furan-2-carboxylate, n-Propyl pyromucate		
13.004	Allyl furan-2-carboxylate; Allyl pyromucate; 2-Propenyl furan-2-carboxylate; 2-Propenyl 2-furoate		
13.005			
13.006	2-Phenylethyl 2-furoate		
13.007	2-Hydrocinnamyl tetrahydrofuran; alpha-(3-phenylpropyl)-tetrahydrofuran;		
13.009	Dihydrocoumarin; 1,2-Benzodihydropyrone; Hydrocoumarin; 2-Chromanone; 2-Oxochroman; o-Hydroxydihydrocinnamic acid lactone		
13.010	Furaneol; 2,5-Dimethyl-4-hydroxy-2,3-dihydrofuran-3-one;		
13.011		Ethyl 3-(2-furyl)prop-2-enoate	
13.012	5-Methyl-2-hydroxyphenylpropenoic acid lactone; 6-Methyl-2H-1-benzopyran-2-one; 6-Methylbenzopyrone;	6-Methyl-1,2-benzopyrone	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
13.015	14	28588-73-0	bis-(2,5-Dimethyl-3-furyl) disulfide	3476	722	249-093-1
13.016	14	28588-75-2	bis-(2-Methyl-3-furyl) disulfide	3259	723	249-095-2
13.017	14	28588-76-3	bis-(2-Methyl-3-furyl) tetrasulfide	3260	724	
13.018	14	98-01-1	Furfural	2489	2014	202-627-7
13.019	14	98-00-0	Furfuryl alcohol	2491	2023	202-626-1
13.020	13	97-99-4	Tetrahydrofurfuryl alcohol	3056	2029	202-625-6
13.021	14	7779-66-0	Isopentyl 4-(2-furan)butyrate	2070	2080	
13.022	14	10031-90-0	Ethyl 3(2-furyl)propionate	2435	2091	233-097-5
13.023	14	7779-67-1	Isopentyl 3-(2-furan)propionate	2071	2092	231-932-8
13.024	14	105-01-1	Isobutyl 3-(2-furyl)propionate	2198	2093	203-261-0
13.025	14	1334-82-3	Pentyl 2-furoate	2072	2109	215-616-7
13.026	14	98-02-2	2-Furanmethanethiol	2493	2202	202-628-2
13.027	12	65504-96-3	2-Pentyl-5 or 6-keto-1,4-dioxane	2076	2205	
13.028	12	65504-45-2	2-Butyl-5 or 6-keto-1,4-dioxane	2204	2206	
13.029	14	625-86-5	2,5-Dimethylfuran		2208	210-914-3
13.030	14	534-22-5	2-Methylfuran		2209	208-594-5
13.031	14	4265-16-1	2-Benzofurancarboxaldehyde	3128	2247	224-248-6
13.032	14	1883-78-9	Furfuryl isopropyl sulfide	3161	2248	
13.033	14	13678-68-7	S-Furfuryl acetothioate	3162	2250	237-173-9
13.034	14	623-30-3	3-(2-Furyl)acrylaldehyde	2494	2252	210-785-3
13.035	14	494-90-6	Menthofuran	3235	2265	207-795-5
13.036	14	623-18-7	Methyl furfuracrylate		2267	
13.037	16	16409-43-1	2-(2-Methylprop-1-enyl)-4-methyltetrahydropyran	3236	2269	240-457-5
13.038	14	50626-02-3	2-Phenyl-3-carbomethoxyfuran	3468	2309	256-663-3
13.039	30	22694-96-8	2,4,5-Trimethyl-delta-3-oxazoline	3525	2319	
13.040	14	65505-16-0	2,5-Dimethyl-3-thiofuroylfuran	3481	2323	265-796-6
13.041	14	55764-28-8	2,5-Dimethyl-3-(isopentylthio)furan	3482	2324	259-802-6
13.042	13	3188-00-9	4,5-Dihydro-2-methylfuran-3(2H)-one	3373	2338	221-685-4
13.043	14	770-27-4	Furfurylidene-2-butanal	2492	11885	212-221-1

FL No	Synonyms	Systematic name	Comments
13.015	3,3(1)-Dithiobis(2,5-dimethylfuran)		
13.016	2-Methyl-3-furyl disulphide; 3,3'-Dithio-2,2'-dimethyldifuran		
13.017	2-Methyl-3-furyl tetrasulphide; 3,3'-Tetrathiobis(2-methylfuran);		
13.018	Furfuraldehyde; 2-Furancarboxaldehyde; Fural; 2-Formylfuran; 2-Furaldehyde; Pyromucic aldehyde; 2-Furylcarboxaldehyde		2, 3
13.019	2-Furancarbinol; Furfuralcohol; alpha-Furylcarbinol; 2-Furylcarbinol; 2-Hydroxymethylfuran		
13.020	Tetrahydro-2-furancarbinol; Tetrahydro-2-furanmethanol; Tetrahydro-2-furylmethanol;		
13.021	Isopentyl furyl-2-butyrate; Isoamyl furfurylpropionate; 3-Methylbutyl 2-furanbutyrate; alpha-Isoamyl furfurylpropionate;	3-Methylbutyl 4-(2-furan)butanoate	
13.022	Ethyl 2-furanpropionate; Ethyl furfurylacetate; Ethyl furylpropionate;		
13.023	Isoamyl furylpropionate; Isoamyl furfurylacetate; Isoamyl furfurylhydracrylate; alpha-Isoamyl furfurylacetate;	3-Methylbutyl 3-(2-furan)propanoate	
13.024	Isobutyl 2-furanpropionate; Isobutyl furfurylacetate; Isobutyl-2-furanpropionate	2-Methylpropyl 3-(2-furyl)propanoate	
13.025	Amyl 2-furoate; Amyl furan-2-carboxylate; Pentyl furan-2-carboxylate;		
13.026	Furfuryl mercaptan; 2-Furylmethane thiol; alpha-Furfuryl mercaptan		
13.027	5-Pentyl-1,4-dioxan-2-one		
13.028	5-Butyl-1,4-dioxan-2-one		
13.029			
13.030			
13.031	2-Formylbenzofuran		
13.032	Isopropyl furfuryl sulphide		
13.033	Furfuryl thioacetate;		
13.034	Furyl acrolein; 2-Furanacrolein; Furylacrolein;	3-(2-Furyl)prop-2-enal	
13.035	3,9-Epoxy-p-mentha-3,8-diene	4,5,6,7-Tetrahydro-3,6-dimethylbenzofuran	2, 3
13.036		Methyl 3-(2-furyl)prop-2-enoate	
13.037	Rose oxide; Tetrahydro-4-methyl-2-(2-methylpropen-1-yl)pyran; Rose oxide levo;		
13.038	Phenyl oxaromate; Ethyl 2-Phenyl-3-furoate	Ethyl 2-phenyl-3-furoate	
13.039	2,4,5-Trimethyl-2,5-dihydrooxazole; 3-Oxazoline, 2,4,5-trimethyl;		
13.040	S-(2,5-Dimethyl-3-furyl) thio-2-furoate		
13.041	S-(2,5-Dimethyl-3-furyl) thioisovalerate	2,5-Dimethyl-3-(3-methylbutylthio)furan	5
13.042	Tetrahydro-2-methyl-3-oxofuran; 2-Methyltetrahydrofuran-3-one; Dihydro-2-methyl-3-furanone; Dihydrofuranone-3(2H)-, 2-methyl;		
13.043	Furfurylidene-2-butyraldehyde; 3-Ethyl-3(2-furyl)-2-propenal; 2-Ethyl-3(2-furyl)acrolein; 3(2-furyl)-2-ethylacrolein;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
13.044	14	623-15-4	4-(2-Furyl)but-3-en-2-one	2495	11838	210-774-3
13.045	14	6975-60-6	1-(2-Furyl)propan-2-one	2496	11837	230-234-0
13.046	14	874-66-8	3-(2-Furyl)-2-methylprop-2-enal	2704	11878	212-866-9
13.047	14	623-22-3	Propyl 3-(2-furyl)acrylate	2945	11842	210-780-6
13.048	13	2217-33-6	Tetrahydrofurfuryl butyrate	3057	11841	211-297-3
13.049	13	637-65-0	Tetrahydrofurfuryl propionate	3058	11843	218-710-6
13.050	14	4437-20-1	Difurfuryl disulfide	3146	11480	224-649-6
13.051	14	59020-90-5	2-Furfuryl thioformate	3158	11770	261-563-8
13.052	14	13679-46-4	Furfuryl methyl ether	3159	10944	237-176-5
13.053	14	1438-91-1	Methyl furfuryl sulfide	3160	11482	215-874-0
13.054	14	1192-62-7	2-Acetylfuran	3163	11653	214-757-1
13.055	14	28588-74-1	2-Methylfuran-3-thiol	3188	11678	249-094-7
13.056	14	13678-67-6	Difurfuryl sulfide	3238	11438	237-172-3
13.057	14	13678-60-9	Furfuryl isovalerate	3283	10642	237-171-8
13.058	14	31704-80-0	3-(5-Methyl-2-furyl) butanal	3307	10355	250-771-4
13.059	14	3777-69-3	2-Pentylfuran	3317	10966	223-234-7
13.060	13	65505-25-1	Tetrahydrofurfuryl cinnamate	3320	11821	265-799-2
13.061	14	4437-22-3	Difurfuryl ether	3337	10930	
13.062	14	623-19-8	Furfuryl propionate	3346	10646	210-776-4
13.063	14	59020-85-8	S-Furfuryl propanethioate	3347	11484	261-562-2
13.064	14	57500-00-2	Methyl furfuryl disulfide	3362	11513	260-773-7
13.065	14	13678-59-6	2-Methyl-5-(methylthio)furan	3366	11550	237-170-2
13.066	14	10599-70-9	3-Acetyl-2,5-dimethylfuran	3391	10921	234-216-3
13.067	14	39252-03-4	Furfuryl octanoate	3396	10645	254-381-5
13.068	14	36701-01-6	Furfuryl valerate	3397	10647	253-160-0
13.069	14	3777-71-7	2-Heptylfuran	3401	10952	223-236-8
13.070	14	14360-50-0	2-Hexanoylfuran	3418	11180	238-333-0
13.071	14	55764-23-3	2,5-Dimethylfuran-3-thiol	3451	11457	259-800-5
13.072	16	3738-00-9	1,5,5,9-Tetramethyl-13-oxatricyclo [8.3.0.0.(4.9)]tridecane	3471	10514	223-118-6
13.073	14	39251-88-2	Octyl 2-furoate	3518	10864	254-378-9
13.074	14	3782-00-1	2,3-Dimethylbenzofuran	3535	11913	223-245-7
13.075	14	61295-51-0	2,6-Dimethyl-3-((2-methyl-3-furyl)thio)heptan-4-one	3538	11915	262-692-2
13.076	06	65620-50-0	6-Hydroxydihydrotheaspirane	3549	11917	
13.077	14	61295-41-8	3-((2-Methyl-3-furyl)thio)heptan-4-one	3570	11922	262-690-1
13.078	14	61295-50-9	4-((2-Methyl-3-furyl)thio)nonan-5-one	3571	11923	262-691-7

FL No	Synonyms	Systematic name	Comments
13.044	Furfurylidine acetone; Furfuralacetone;		
13.045	Furfuryl methyl ketone; 2-Acetyl-furan; Furyl acetone; Methyl furfuryl ketone		
13.046	2-Furfurylidene-propionaldehyde; 2-Methyl-3-furylacrolein; alpha-Methyl-beta-furylacrolein; Furfurylidene-2-propanal;		
13.047	Propyl furanacrylate; Propyl furylacrylate;	Propyl 3(2-furyl)prop-2-enoate	
13.048	Tetrahydro-2-furylmethyl n-Butanoate; Tetrahydrofurfuryl n-Butyrate;		
13.049	2-Tetrahydrofurylmethyl propionate;		
13.050	Bis-(2-furfuryl)disulfide; 2-Furfuryl disulphide;		
13.051	2-Furylmethanethiol formate; Furfurylthio formate		
13.052	Methyl furfuryl ether		
13.053			
13.054	2-Furyl methyl ketone; Methyl 2-Furyl ketone		
13.055	2-Methyl-3-furylmercaptan		
13.056	2,2'-(Thiodimethylene)-difuran; 2-Furfuryl monosulphide; Difurfuryl monosulphide;		
13.057		Furfuryl 3-methylbutanoate	
13.058	2 Furanpropanal, beta,5-dimethyl-; 3-(5-Methyl-2-furyl)butyraldehyde;		
13.059	2-Amylfuran		
13.060	Cinnamic acid, tetrahydrofurfuryl ester; Tetrahydro-2-furylmethyl 3-phenylpropenoate; Tetrahydro-2-furylmethyl cinnamate	Tetrahydrofurfuryl 3-phenylprop-2-enoate	
13.061	Furfuryl ether		
13.062	Furfuryl propanoate		
13.063	Furfuryl thiopropionate		
13.064	Furfuryl methyl disulphide; Methyl 2-furylmethyl disulphide		
13.065	Methyl 5-methyl-2-furyl sulfide; (5-Methylfuryl-2)-thiomethane;		
13.066	2,5-Dimethyl-3-acetylfuran		
13.067	alpha-Furfuryl caprylate		
13.068	Furfuryl pentanoate; alpha-Furfuryl pentanoate; alpha-Furfuryl valerate		
13.069			
13.070	2-Furyl pentyl ketone;		
13.071	2,5-Dimethyl-3-mercaptofuran; 2,5-Dimethyl-3-furylmercaptan		
13.072	Tetramethyl-perhydronaphtofuran;		
13.073	Octyl 2-furancarboxylate		
13.074			
13.075	1,3-Diisopropylacetyl-2-methyl-3-furyl sulphide; 3((2-methyl-3-furyl)thio)-2,6-dimethyl-4-heptanone		
13.076	6-Hydroxy-2,6,10,10-tetramethyl-1-oxaspiro(4,5)decane	2,6,10,10-Tetramethyl-1-oxaspiro[4.5]decan-6-ol	
13.077	1,3-Diethylacetyl 2-methyl-3-furyl sulfide		
13.078	1,3-Dipropylacetyl 2-methyl-3-furyl sulfide		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
13.079	14	65505-17-1	Methyl 2-methyl-3-furyl disulfide	3573	11924	265-797-1
13.082	14	61197-09-9	Propyl 2-methyl-3-furyl disulfide	3607		262-650-3
13.083	14	1193-79-9	2-Acetyl-5-methylfuran	3609	11038	214-779-1
13.084	13	27538-09-6	2-Ethyl-4-hydroxy-5-methyl-3(2H)-furanone	3623		248-513-0
13.085	13	19322-27-1	4-Hydroxy-5-methylfuran-3(2H)-one	3635	11785	242-961-0
13.086	14	26486-14-6	4,5-Dihydro-2-methyl-3-thioacetoxyfuran	3636		247-731-3
13.087	30	57893-27-3	6-Acetoxydihydrotheaspirane	3651		261-005-3
13.088	16	1786-08-9	3,6-Dihydro-4-methyl-2-(2-methylprop-1-en-1-yl)-2H-pyran	3661		217-241-4
13.089	13	4077-47-8	2,5-Dimethyl-4-methoxyfuran-3(2H)-one	3664		223-797-9
13.090	13	7416-35-5	2,2-Dimethyl-5-(1-methylprop-1-enyl)tetrahydrofuran	3665	10937	231-028-3
13.091	30	53833-30-0	4,5-Dimethyl-2-ethylloxazole	3672		258-815-4
13.092	14	3208-16-0	2-Ethylfuran	3673	11706	221-714-0
13.093	14	94278-27-0	Ethyl 3-(2-furfurylthio)propionate	3674		304-716-7
13.094	16	7392-19-0	2,6,6-Trimethyl-2-vinyltetrahydropyran	3735	10976	230-983-3
13.095	13	41239-48-9	2,5-Diethyltetrahydrofuran	3743	11882	255-274-6
13.096	13	5989-33-3	5(2-Hydroxyisopropyl)-2-methyl-2-vinyltetrahydrofuran	3746	2214	227-814-0
13.097	13	13679-86-2	Anhydrolinalool oxide (5)	3759	11944	237-184-9
13.098	16	36431-72-8	Theaspirane	3774	10515	253-031-9
13.099	13	4166-20-5	4-Acetoxy-2,5-dimethylfuran-3(2H)-one	3797		
13.100	30	13678-73-4	2-Acetyl-1-furfurylpyrrole		11941	
13.101	14	22940-86-9	2-Acetyl-3,5-dimethylfuran			
13.102	14	583-33-5	Butyl 2-furoate			
13.103	14	4466-24-4	2-Butylfuran		10927	224-732-7
13.104	13	1004-29-1	2-Butyltetrahydrofuran			213-718-6
13.105	14	100113-53-9	2-Butyrylfuran		11045	
13.106	14	83469-85-6	2-Decylfuran			
13.107	14	64280-32-6	2,4-Difurfurylfuran			
13.108	14	26486-13-5	4,5-Dihydro-3-mercapto-2-methylfuran			
13.109	11	17092-92-1	Dihydroactinidiolide		10931	
13.110	30	62147-49-3	2,5-Dihydroxy-2,5-di(hydroxymethyl)-1,4-dioxane			
13.112	30	53833-32-2	4,5-Dimethyl-2-propyloxazole		11379	258-817-5
13.113	14	61197-06-6	2,5-Dimethyl-3-(methylthio)furan			
13.114	14	63359-63-7	2,5-Dimethyl-3-(methylthio)furan			
13.115	30	77311-02-5	2,4-Dimethyl-3-oxazoline			
13.116	14	55764-22-2	2,5-Dimethyl-3-thioacetoxyfuran			259-799-1
13.117	13	65330-49-6	2,5-Dimethyl-4-ethoxyfuran-3(2H)-one			265-701-8
13.118	30	30408-61-8	2,5-Dimethyl-4-ethylloxazole			250-181-7
13.119	13	14400-67-0	2,5-Dimethylfuran-3(2H)-one		11066	238-365-5
13.120	16	1003-38-9	2,5-Dimethyltetrahydrofuran			213-707-6
13.121	11	87-05-8	7-Ethoxy-4-methylcoumarin		11870	201-721-5
13.122	14	614-99-3	Ethyl 2-furoate		10588	210-404-0
13.123	14	6270-56-0	Ethyl furfuryl ether		10940	228-454-7

FL No	Synonyms	Systematic name	Comments
13.079			
13.082	2-Methyl-3-furyl propyl disulphide		
13.083	Methyl 5-methyl-2-furyl ketone; Ethanone, 1-(5-methyl-2-furanyl)-; 1-(5-methyl-2-furyl)ethanone;		
13.084	5-Ethyl-4-hydroxy-2-methyl-3(2h)-furanone;		5
13.085	2,3-Dihydro-4-hydroxy-5-methylfuran-3-one; 5-Methyl-4-hydroxy-3(2H)-furanone;		
13.086	2-Methyl-4,5-dihydro-3-furanthiol acetate; 4,5-Dihydro-2-methyl-3-furanthiol acetate		
13.087	2,6,10,10-Tetramethyl-1-oxaspiro(4.5)dec-6-yl acetate;	2,6,10,10-Tetramethyl-1-oxaspiro[4.5]decan-6-yl acetate	
13.088	3,6-Dihydro-4-methyl-2-(2-methyl-1-propenyl)-2H-pyran;		
13.089	Mesifurane; 4-Methoxy-2,5-dimethyl-3-furanone		
13.090	Tetrahydrofuran, 2,2-dimethyl-5-(1-methyl-1-propenyl)-;		
13.091			
13.092	2-Ethylloxole		
13.093	Ethyl beta-furfuryl alpha-thiopropionate; Ethyl beta-furfuryl-alpha-thiopropionate		
13.094	Bois de rose oxide		
13.095	Tetrahydrofuran, 2,5-diethyl-; Furan, 2,5-diethyltetrahydro-;		
13.096	Linalool oxide B (cis, 5-ring);		5
13.097	Anhydro linalool oxide; Dehydroxy linalool oxide;	2-(1-Methylene-ethyl)-5-methyl-5-vinyltetrahydrofuran	
13.098	1-Oxaspiro-2,6,10,10-tetra-methyl[4.5]dec-6-ene-;	2,6,10,10-Tetramethyl-1-oxaspiro[4.5]dec-6-ene	
13.099			
13.100			
13.101			
13.102			
13.103			
13.104			
13.105	2-Furyl propyl ketone		
13.106			
13.107			
13.108	2-Methyl-4,5-dihydrofuran-3-thiol		
13.109		2,2,6-Trimethyl-7-oxa-bicyclo[4.3.0]non-9-ene	
13.110			
13.112			
13.113			
13.114			
13.115			
13.116	S-(2,5-dimethyl-3-furyl) ethanethioate		
13.117	4-ethoxy-2,5-dimethylfuran-3(2H)-one		
13.118	4-ethyl-2,5-dimethyloxazole		
13.119			
13.120	tetrahydro-2,5-dimethylfuran		
13.121			
13.122			
13.123	2-(Ethoxymethyl)furan		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
13.124	14	2024-70-6	Ethyl furfuryl sulfide			
13.125	14	1703-52-2	2-Ethyl-5-methylfuran		10942	216-937-5
13.126	14	13529-27-6	Furfural diethyl acetal			236-872-6
13.127	14	13678-61-0	Furfuryl 2-methylbutyrate		10643	
13.128	14	623-17-6	Furfuryl acetate	2490	2065	210-775-9
13.129	14	59020-84-7	Furfuryl but-2-enoate			
13.130	14	623-21-2	Furfuryl butyrate		638	210-779-0
13.131	14	39481-28-2	Furfuryl heptanoate			
13.132	14	39252-02-3	Furfuryl hexanoate			
13.133	14	6270-55-9	Furfuryl isobutyrate		10641	228-453-1
13.134	30	1438-94-4	1-Furfurylpyrrole	3284	2317	215-876-1
13.135	14	58066-86-7	1-(2-Furfurylthio)propanone			
13.136	14	88-14-2	2-Furoic acid		10098	201-803-0
13.137	14	65545-81-5	3-(2-Furyl)-2-phenylprop-2-enal	3586	11928	
13.138	14	699-17-2	1-(2-Furyl)butan-3-one		11084	211-831-5
13.139	14	67-47-0	5-Hydroxymethylfurfuraldehyde		11112	200-654-9
13.140	30	1365-19-1	Linalool oxide (5-ring)	3746	11876	215-723-9
13.141	14	108499-33-8	Methyl (2-furfurylthio)acetate			
13.142	14	13679-61-3	S-Methyl 2-furanthiocarboxylate	3311	11547	237-177-0
13.143	14	94278-26-9	Methyl 3-(furfurylthio)propionate			304-715-1
13.144	14	78818-78-7	Methyl 5-methylfurfuryl disulfide			
13.145	14	13679-60-2	Methyl 5-methylfurfuryl sulfide		11522	
13.146	14	66169-00-4	Methyl furfuryl trisulfide			
13.147	13	92343-93-6	2-(3-Methyl-1,3-butadienyl)-4-methyltetrahydrofuran			
13.148	14	15186-51-3	3-Methyl-2(3-methylbut-2-enyl)furan			
13.149	14	59303-05-8	5-Methyl-2-furanmethanethiol			
13.150	14	5555-90-8	3-(5-Methyl-2-furyl)prop-2-enal			
13.151	14	65530-53-2	2-Methyl-3,5 and 6-(furfurylthio)pyrazine	3189	2287	
13.152	14	63012-97-5	2-Methyl-3-(methylthio)furan	3949		
13.153	14	55764-25-5	2-Methyl-3-furyl thioacetate			259-801-0
13.154	30	95-21-6	2-Methyl-4,5-benzo-oxazole			202-399-9
13.155	14	10599-69-6	2-Methyl-5-propionylfuran		11158	234-215-8
13.156	13	41763-99-9	2-Methylfuran-3(2H)-one			
13.157	13	3511-32-8	5-Methylfuran-3(2H)-one			
13.158	13	96-47-9	2-Methyltetrahydrofuran		10964	202-507-4
13.159	13	34003-72-0	5-Methyltetrahydrofuran-3-one			
13.160	13	57124-87-5	2-Methyltetrahydrofuran-3-thiol	3787		260-572-4
13.161	11	4430-31-3	Octahydrocoumarin	3791		224-623-4
13.162	14	4179-38-8	2-Octylfuran		10965	224-049-4
13.163	14	3194-17-0	2-Pentanoylfuran			
13.164	14	4229-91-8	2-Propylfuran		10971	224-182-8
13.165	16	5552-30-7	6,7,8,8a-Tetrahydro-2,5,5,8a-tetramethyl-5H-1-benzopyran	3822		226-916-2
13.166	13	637-64-9	Tetrahydrofurfuryl acetate	3055	2069	211-296-8
13.167	13	5421-00-1	Tetrahydrofuryl phenylacetate			226-534-6
13.169	30	20662-84-4	Trimethyloxazole		11424	243-952-4

FL No	Synonyms	Systematic name	Comments
13.124			
13.125			
13.126	2-furaldehyde diethyl acetal		2, 3
13.127			
13.128			
13.129			
13.130			
13.131			
13.132			
13.133		Furfuryl 2-methylpropanoate	
13.134	1-furfuryl-1H-pyrrole		
13.135			
13.136		2- Furancarboxylic acid	
13.137			
13.138	4-(2- Furyl) butan-2-one;		
13.139	5-(Hydroxymethyl)-2-furaldehyde		
13.140		5-(1-hydroxy-1-isopropyl)-2-methyl-2-vinyl tetrahydrofuran	5
13.141			
13.142	Furoylthiomethane; Methyl thio-2-furoate		
13.143			
13.144			
13.145			
13.146			
13.147			
13.148			
13.149			
13.150			
13.151	Methyl(furfurylthio)pyrazine (mixture of isomers)		
13.152	Dimethylthiofurane		
13.153	S-(2-methyl-3-furyl) ethanethioate		
13.154	2-methylbenzoxazole		
13.155	1-(5-methyl-2-furyl)propan-1-one		
13.156			
13.157			
13.158	tetrahydro-2-methylfuran		
13.159			
13.160			
13.161	Bicyclononalactone; Cyclohexyl lactone; Octahydro-2H-1-benzopyran-2-one	Octahydro-1(2H)-benzopyran-2-one	
13.162			
13.163			
13.164			
13.165			
13.166			
13.167			5
13.169	2,4,5-trimethyloxazole		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
13.170	16	3033-23-6	2S-cis-Tetrahydro-4-methyl-2-(2-methyl-1-propenyl)-2H-pyran			221-217-9
13.175	13		4-Acetyl-2,5-dimethylfuran-3(2H)-one			
13.176	14		Furaneyl butyrate			
13.178	14		3-(Furfuryldithio)-2-methylfuran			
13.181	14		2-Methyl 3-furylbutan-3-on-1-yl disulphide			
13.182	14		2-Methyl-3-thioacetoxytetrahydrofuran			
13.185	14		2-Furfuryl 3-oxo-2-butyl disulphide			
13.187	14	23747-34-4	2-Propionyl-3-methyl-furan		10970	
13.188	14	59303-07-0	2-Methyl-3-furfurylthiopyrazine	3189		
13.189	16	56469-39-7	Linalool oxide(5) acetate			
13.190	14	61296-44-1	3-((2-Methyl3-furyl)thio)-2-butanone			
14.001	28	119-65-3	Isoquinoline	2978	487	204-341-8
14.002	30	491-35-0	4-Methylquinoline		488	207-734-2
14.003	30	94-62-2	Piperine	2909	492	202-348-0
14.004	28	83-34-1	3-Methylindole	3019	493	201-471-7
14.005	24	15707-24-1	2,3-Diethylpyrazine	3136	534	239-800-1
14.006	24	15707-23-0	2-Ethyl-3-methylpyrazine	3155	548	239-799-8
14.007	28	120-72-9	Indole	2593	560	204-420-7
14.008	28	110-86-1	Pyridine	2966	604	203-809-9
14.010	30	110-89-4	Piperidine	2908	675	203-813-0
14.011	30	130-89-2	Quinine hydrochloride	2976	715	205-001-1
14.014	30	36267-71-7	5,7-Dihydro-2-methylthieno(3,4-d)pyrimidine	3338	720	252-940-8
14.015	24	34413-35-9	5,6,7,8-Tetrahydroquinoxaline	3321	721	252-002-8
14.016	24	27043-05-6	2,5-Dimethyl-3-ethylpyrazine	3149	727	248-182-2
14.017	24	13360-64-0	2-Ethyl-5-methylpyrazine	3154	728	236-416-6
14.018	24	1124-11-4	2,3,5,6-Tetramethylpyrazine	3237	734	214-391-2
14.019	24	14667-55-1	2,3,5-Trimethylpyrazine	3244	735	2387120
14.020	24	123-32-0	2,5-Dimethylpyrazine	3272	2210	204-618-3
14.021	24	108-50-9	2,6-Dimethylpyrazine	3273	2211	203-589-4
14.022	24	13925-00-3	Ethylpyrazine	3281	2213	237-691-5
14.023	28	96-54-8	1-Methylpyrrole		2217	202-513-7
14.024	24	13925-07-0	2-Ethyl-3,5-dimethylpyrazine	3150	2245	237-694-1
14.025	24	63450-30-6	2,5 or 6-Methoxy-3-methylpyrazine	3183	2266	264-168-9
14.026	24	13925-05-8	2-Isopropyl-5-methylpyrazine	3554	2268	
14.027	24	109-08-0	2-Methylpyrazine	3309	2270	203-645-8
14.028	24	13708-12-8	5-Methylquinoxaline	3203	2271	237-246-5
14.029	30	65504-93-0	1-Phenyl-(3 or 5)-propylpyrazole	3727	2277	
14.030	28	2044-73-7	2-Pyridine methanethiol	3232	2279	218-061-9
14.031	24	35250-53-4	Pyrazineethanethiol	3230	2285	
14.032	24	22047-25-2	Acetylpyrazine	3126	2286	244-753-5
14.034	24	21948-70-9	Pyrazinyl methyl sulfide	3231	2288	244-675-1
14.035	24	67952-65-2	2-Methyl-3,5 or 6-methylthiopyrazine	3208	2290	267-918-3
14.037	24	23747-48-0	6,7-Dihydro-5-methyl-5H-cyclopentapyrazine	3306	2314	245-864-1
14.038	28	1122-62-9	2-Acetylpyridine	3251	2315	214-355-6

FL No	Synonyms	Systematic name	Comments
13.170			
13.175			
13.176		2,5-Dimethylfuran-3(2H)-on-4-yl butanoate	
13.178			
13.181	2-Methyl 3-furyl 3-oxobutyl disulfide		
13.182			
13.185			
13.187			
13.188			
13.189		2-(5-methyl-5-vinyltetrahydro-2-furyl) propan-2-yl acetate	
13.190			
14.001	2-Azanaphthalene; 2-Benzazine; 3,4-Benzopyrine; BenzoPyrine		
14.002	Lepidine		
14.003	1-Piperoylpiperidine; Piperoylpiperidine	1-(5-(3,4-Methylenedioxyphenyl)-1-oxo-2,4-pentadienyl)piperidine	
14.004	Skatole; 3-Methyl-4,5-benzopyrrole; Beta-Methylindole		
14.005			
14.006			
14.007	Benzopyrrole; 1-benzazole; 1-Benzazole; 1-BenzoPyrrole; 2,3-Benzopyrrole		
14.008	Azine; Azabenzene;		
14.010	Hexahydropyridine; Hexazana; Pentamethylenimine		
14.011	Quinine chloride; Quinine monohydrochloride;		2, 3
14.014			
14.015	Cyclohexapyrazine; Tetrahydroquinoxaline;		
14.016			5
14.017	2-Methyl-5-ethyl pyrazine; 2-Methyl-5-ethylpyrazine		
14.018			
14.019			
14.020	2,5-Dimethyl-1,4-diazine; Glycoline; Ketine; 2,5-Dimethyl-1,4-diazine; 2,5-Dimethylparadiazine; 2,5-Dimethylpiazine		
14.021	2,6-Dimethyl-1,4-diazine; 2,6-Dimethyl-1,4-diazine; 2,6-Dimethylparadiazine; 2,6-Dimethylpiazine		
14.022	2-Ethyl pyrazine; 2-Ethyl-1,4-diazine; 2-Ethyl-1,4-diazine		
14.023	N-Methylpyrrole		
14.024	2,6-Dimethyl-3-ethylpyrazine		
14.025	Methylmethoxy pyrazine		
14.026	5-Isopropyl-2-methylpyrazine; 2-Methyl-5-isopropylpyrazine		
14.027	2-Methyl-1,4-diazine		
14.028			
14.029	1-Phenyl-3 or 5-propyl-1,2-diazole;		
14.030	2-Mercaptomethylpyridine; 2-Pyridylmethanethiol; 2-Pyridylmethyl mercaptan		
14.031	2-Pyrazinylethanethiol; Pyrazinyl ethanethiol		
14.032	2-Acetylpyrazine; Methyl pyrazinyl ketone		
14.034	2-Methylthiopyrazine; Pyrazinylmethyl methyl sulphide	(Methylthio)pyrazine	
14.035	Methyl(methylthio)pyrazine (mixture of isomers)		
14.037			
14.038	Methyl-2-pyridyl ketone; 2-Acetopyridine		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
14.039	28	350-03-8	3-Acetylpyridine	3424	2316	206-496-7
14.041	28	109-97-7	Pyrrrole	3386	2318	203-724-7
14.042	28	91-62-3	6-Methylquinoline	2744	2339	202-084-6
14.043	24	24683-00-9	2-Isobutyl-3-methoxypyrazine	3132	11338	246-402-1
14.044	24	13925-06-9	2-Isobutyl-3-methylpyrazine	3133		237-693-6
14.045	28	39741-41-8	2-Acetyl-1-ethylpyrrole	3147	11371	
14.046	28	932-16-1	2-Acetyl-1-methylpyrrole	3184	11373	213-247-6
14.047	28	1072-83-9	2-Acetylpyrrole	3202	11721	214-016-2
14.049	24	32974-92-8	2-Acetyl-3-ethylpyrazine	3250	11293	251-316-2
14.050	24	5910-89-4	2,3-Dimethylpyrazine	3271	11323	227-630-0
14.051	24	68739-00-4	2,5 or 6-Methoxy-3-ethylpyrazine	3280	11329	272-125-0
14.052	24	38713-41-6	Isopropenylpyrazine	3296	11341	
14.053	24	59021-02-2	Mercaptomethylpyrazine	3299	11502	
14.054	24	3149-28-8	Methoxypyrazine	3302	11347	221-579-8
14.055	24	54300-08-2	2-Acetyl-3,5-dimethylpyrazine	3327	11294	259-076-0
14.056	24	18138-04-0	2,3-Diethyl-5-methylpyrazine	3336	11303	242-024-6
14.057	24	25773-40-4	2-Isopropyl-3-methoxypyrazine	3358	11344	247-256-1
14.058	28	6304-24-1	2-Isobutylpyridine	3370	11395	228-606-2
14.059	28	14159-61-6	3-Isobutylpyridine	3371	11396	2380036
14.060	28	2294-76-0	2-Pentylpyridine	3383	11412	218-937-0
14.061	28	536-78-7	3-Ethylpyridine	3394	11386	208-647-2
14.062	24	24168-70-5	2-(sec-Butyl)-3-methoxypyrazine	3433	11300	246-050-9
14.063	28	91-22-5	Quinoline	3470	11364	202-051-6
14.064	28	123-75-1	Pyrrolidine	3523	10491	204-648-7
14.065	28	108-48-5	2,6-Dimethylpyridine	3540	11381	203-587-3
14.066	28	104-90-5	5-Ethyl-2-methylpyridine	3546	11385	203-250-0
14.067	24	32737-14-7	2-Methyl-3,5 or 6-ethoxypyrazine	3569	11921	2511846
14.068	28	1073-26-3	2-Propionylpyrrole	3614	11942	214-026-7
14.069	24	28217-92-7	Cyclohexylmethylpyrazine	3631		248-905-1
14.070	30	67860-38-2	4-Acetyl-2-methylpyrimidine	3654		
14.071	28	93-60-7	Methyl nicotinate	3709		202-261-8
14.072	28	2110-18-1	2-(3-Phenylpropyl)pyridine	3751		218-300-7
14.076	24		2-Methoxy-(3,5 or 6)-methylpyrazine	3183	2266	
14.077	24		2-Ethyl-(3,5 or 6)-methoxypyrazine (85 %) and 2-Methyl-(3,5 or 6)-methoxypyrazine (13 %)	3280	11329	
14.078	24		2-Isopropyl-(5 or 6)-methoxypyrazine	3358	11344	
14.079	28	27300-27-2	2-Acetyl-1,4,5,6-tetrahydropyridine			
14.080	33	99583-29-6	2-Acetyl-1-pyrroline			
14.081	24	54300-10-6	5-Acetyl-2,3-dimethylpyrazine			
14.082	24	23787-80-6	2-Acetyl-3-methylpyrazine		11296	245-889-8
14.083	24	43108-58-3	2-Acetyl-5-ethylpyrazine			
14.084	24	22047-27-4	2-Acetyl-5-methylpyrazine		11297	
14.085	28	6982-72-5	2-Acetyl-5-methylpyrrole			
14.086	24	34413-34-8	2-Acetyl-6-ethylpyrazine		11295	
14.087	24	22047-26-3	2-Acetyl-6-methylpyrazine		11298	

FL No	Synonyms	Systematic name	Comments
14.039	beta-Acetylpyridine; Methyl 3-pyridyl ketone; Methyl Beta-Pyridyl ketone; Methyl pyridyl ketone		
14.041	Azole; Divinyleneimine; Imidole		
14.042	p-Methylquinoline; p-Toluquinoline		
14.043	2-Butyl-3-methoxypyrazine; 2-Methoxy-3-isobutyl pyrazine;		
14.044	2-Butyl-3-methylpyrazine; 2-methyl-3-isobutylpyrazine	2-(2-Methylpropyl)-3-methylpyrazine	
14.045	1-Ethyl-2-acetylazole		
14.046	1-Methylpyrrol-2-yl methyl ketone; 2-Acetyl-n-methyl pyrrol; Methyl 1-methylpyrrol-2-yl ketone		
14.047	Methyl-2-pyrrolyl ketone; 2-Acetopyrrole; 2-Pyrrolyl methyl ketone		
14.049	2-Ethyl-3-pyrazinyl methyl ketone; 2-Acetyl 3-ethyl-1,4-diazine		
14.050	2,3-Dimethyl-1,4-diazine		
14.051	3-Ethyl-(5 or 6)-methoxypyrazine, 5 or 6-Methoxy-3-ethyl-pyrazine; 2,5 or 6-methoxy-3-ethylpyrazine;		5
14.052	2-Isopropenyl-1,4-diazine	(1-Methylene-ethyl)pyrazine	
14.053	Pyrazine methanethiol		
14.054	2 Methoxy-1,4-diazine		
14.055			
14.056			
14.057			5
14.058	2-Butylpyridine;	2-(2-Methylpropyl)pyridine	
14.059	3-Butylpyridine;	3-(2-Methylpropyl)pyridine	
14.060	2-Amylpyridine		
14.061	Beta-Ethylpyridine; Beta-Lutidine		
14.062	2-But-2-yl-3-methoxypyrazine, 2-Methoxy-3-(1-methylpropyl)-cyclohexanone; 2-Methoxy-3-sec-Butylpyrazine	2-(1-Methylpropyl)-3-methoxypyrazine	
14.063	1-Benzazine; 2,3-Benzopyrine; Benzopyrine; Chinolein; Leucoline; 1-Azanephtalene; Leucol	2,3-Benzopyridine	
14.064	Tetramethylenimine	Tetrahydropyrrole	
14.065	2,6-Lutidine		
14.066	5-Ethyl-2-picoline; 2-Methyl-5-ethylpyridine		
14.067			5
14.068	Ethyl 2-pyrrolyl ketone		
14.069	2-Pyrazine cyclohexyl methyl; 2-Pyrazinyl cyclohexyl methyl		
14.070	Ethanone, 1-(2-methyl-4-pyrimidinyl)-;		
14.071	3-Carbomethoxypyridine	Methyl 3-pyridinecarboxylate	
14.072			
14.076			
14.077			
14.078			5
14.079			
14.080			
14.081			
14.082			
14.083			
14.084			
14.085			
14.086			
14.087			

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
14.088	28	576-15-8	1-Acetylundole			209-396-1
14.089	28	1122-54-9	4-Acetylpyridine			214-350-9
14.090	28	25224-14-0	3-(sec-Butyl)pyridine			
14.091	24	15987-00-5	2-Butyl-3-methylpyrazine			240-126-5
14.092	28	5058-19-5	2-Butylpyridine			225-758-1
14.093	28	539-32-2	3-Butylpyridine			208-715-1
14.094	28	74808-78-9	4-Butylquinoline			
14.095	24	18138-05-1	3,5-Diethyl-2-methylpyrazine	3916	11305	
14.096	24	32736-91-7	2,5-Diethyl-3-methylpyrazine	3915	11304	
14.097	24	13238-84-1	2,5-Diethylpyrazine		11306	
14.098	24	38917-62-3	6,7-Dihydro-2,3-dimethyl-5H-cyclopentapyrazine	3917	11309	
14.099	24	41330-21-6	6,7-Dihydro-5,7-dimethyl-5H-cyclopentapyrazine			
14.100	24	55031-15-7	3,(5- or 6-)Dimethyl-2-ethylpyrazine	3149	727	
14.101	24	40790-20-3	2,5-Dimethyl-3-isopropylpyrazine		11318	
14.102	24	38917-61-2	5,6-Dimethyldihydrocyclopentapyrazine			
14.103	28	583-61-9	2,3-Dimethylpyridine			209-514-1
14.104	28	108-47-4	2,4-Dimethylpyridine			203-586-8
14.105	28	583-58-4	3,4-Dimethylpyridine			209-511-5
14.106	28	591-22-0	3,5-Dimethylpyridine		11382	209-708-6
14.107	28	625-84-3	2,5-Dimethylpyrrole		11383	210-913-8
14.108	24	2379-55-7	2,3-Dimethylquinoxaline			219-162-0
14.109	24	32737-14-7	2-Ethoxy-3-methylpyrazine	3569	11325	251-184-6
14.110	28	614-18-6	Ethyl nicotinate			210-370-7
14.111	24	13360-65-1	3-Ethyl-2,5-dimethylpyrazine	3149	2246	236-417-1
14.112	24	25680-58-4	2-Ethyl-3-methoxypyrazine	3280	11329	247-184-0
14.113	24	52517-53-0	5-Ethyl-6,7-dihydro-5H-cyclopentapyrazine			
14.114	24	13925-03-6	2-Ethyl-6-methylpyrazine	3919	11331	237-692-0
14.115	28	100-71-0	2-Ethylpyridine		11767	202-881-9
14.116	28	536-75-4	4-Ethylpyridine		11387	208-646-7
14.117	28	1129-69-7	2-Hexylpyridine			214-454-4
14.118	28	142-08-5	2-Hydroxypyridine			205-520-3
14.120	28	553-60-6	Isopropyl nicotinate			209-043-1
14.121	24	93905-03-4	2-Isopropyl-(3,5 or 6)-methoxypyrazine	3358	11344	299-837-4
14.122	24	67952-59-4	2-Isopropyl-3-methylthiopyrazine		11342	267-913-6
14.123	24	29460-90-0	Isopropylpyrazine	3940	11343	249-646-7
14.124	28	644-98-4	2-Isopropylpyridine		11400	211-426-3
14.125	28	696-30-0	4-Isopropylpyridine			211-794-5
14.126	24	2847-30-5	2-Methoxy-3-methylpyrazine	3183	2266	220-651-6
14.127	24	25680-57-3	2-Methoxy-3-propylpyrazine			
14.128	24	2882-20-4	2-Methyl-3-methylthiopyrazine			220-736-8
14.129	24	15986-80-8	2-Methyl-3-propylpyrazine			240-121-8
14.131	28	95-20-5	2-Methylindole			202-398-3
14.133	33	109-05-7	2-Methylpiperidine			203-642-1
14.134	28	109-06-8	2-Methylpyridine		11415	203-643-7
14.135	28	108-99-6	3-Methylpyridine		11801	203-636-9
14.136	28	108-89-4	4-Methylpyridine		11416	203-626-4
14.137	28	120-94-5	1-Methylpyrrolidine			204-438-5
14.138	30	91-63-4	2-Methylquinoline		11358	202-085-1

FL No	Synonyms	Systematic name	Comments
14.088	N-Acetylundole; 1-Acetyl-1H-indole		
14.089	methyl 4-pyridyl ketone?		
14.090	3-But-2-ylpyridine	3-(1-Methylpropyl)pyridine	
14.091			
14.092			
14.093			
14.094			
14.095	2,6-Diethyl-3-methylpyrazine		
14.096			
14.097			
14.098			
14.099			
14.100	2,(5 or 6)- Dimethyl-3-ethylpyrazine; 2-Ethyl-3,5(6)-dimethyl pyrazine; 3-Ethyl-2,5(6)-dimethyl pyrazine		
14.101			
14.102			
14.103			
14.104			
14.105			
14.106			
14.107	2,5-dimethyl-1H-pyrrole		
14.108			
14.109			5
14.110	3-Pyridinecarboxylic acid, ethyl ester	Ethyl 3-pyridine carboxylate	
14.111			5
14.112			5
14.113			
14.114	2-Methyl-6-ethylpyrazine; 6-Methyl-2-ethylpyrazine		
14.115			
14.116			
14.117			
14.118	2-pyridone;		
14.120		Isopropyl 3-pyridinecarboxylate	
14.121			
14.122		2-(1-methylethyl)-3-(methylthio)pyrazine	
14.123		(2-Methylpropyl)pyrazine	
14.124			
14.125			
14.126	2-Methyl-3-methoxypyrazine		5
14.127			
14.128	2-methyl-3-(methylthio)pyrazine		
14.129			
14.131			
14.133	alpha-pipecoline		
14.134	alpha-Picoline; 2-Picoline		
14.135	beta-Picoline; 3-Picoline		
14.136	gamma-Picoline; 4-Picoline		
14.137			
14.138	Quinaldine		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
14.139	24	7251-61-8	2-Methylquinoxaline			230-664-9
14.140	28	1802-20-6	3-Pentylpyridine			
14.141	33	110-85-0	Piperazine			203-808-3
14.142	24	18138-03-9	Propylpyrazine	3961	11362	242-023-0
14.143	28	4673-31-8	3-Propylpyridine		11419	225-122-3
14.144	24	290-37-9	Pyrazine		11363	206-027-6
14.145	28	1003-29-8	Pyrrrole-2-carbaldehyde		11393	213-705-5
14.146	30	130-95-0	Quinine			205-003-2
14.147	24	91-19-0	Quinoxaline		11365	202-047-4
14.148	24	52517-54-1	5,6,7,8-Tetrahydro-5-methylquinoxaline			
14.149	28	91-61-2	1,2,3,4-Tetrahydro-6-methylquinoline			202-083-0
14.150	28	108-75-8	2,4,6-Trimethylpyridine			203-613-3
14.151	24	4177-16-6	Vinylpyrazine		11370	224-045-2
14.152	30	6119-70-6	Quinine sulphate	2977		
14.153	28	1333-53-5	(1-Methylethyl)quinoline			215-595-4
14.154	30	7549-43-1	Quinine chlorhydrate			231-437-7
14.155	30	6119-47-7	Quinine monohydrochloride dihydrate			
14.156	33	147030-02-2	(E)-1-(1-oxo-2decenyl)-piperidine			
14.157	33	78910-33-5	(E,E)-1-(oxo-2,4-decadienyl)-pyrrolidine			
14.158	24	94089-22-2	2-iso-Propoxy-3-methyl pyrazine			302-122-2
14.161	24		6,7-Dihydro-2,5-dimethyl-5H-cyclopentapyrazine		11310	
15.001	29	7774-74-5	2-Mercaptothiophene	3062	478	231-881-1
15.002	29	38205-64-0	2-Methyl-5-methoxythiazole	3192	736	
15.004	29	13679-70-4	5-Methyl-2-thiophenecarbaldehyde	3209	2203	237-178-6
15.005	29	65505-18-2	2,4-Dimethyl-5-vinylthiazole	3145	2237	
15.006	20	55704-78-4	2,5-Dihydroxy-2,5-dimethyl-1,4-dithiane	3450	2322	259-770-3
15.007	20	38325-25-6	spiro(2,4-Dithia-1-methyl-8-oxa-bicyclo[3.3.0]octane-3,3'-(1'-oxa-2'-methyl)-cyclopentane) and spiro(Dithia-6-methyl-7-oxa-bicyclo[3.3.0]octane-3,3'-(1'-oxa-2-methyl)cyclopentane)	3270	2325	253-884-7
15.008	29	6911-51-9	2-Thienyl disulfide	3323	2333	
15.009	20	828-26-2	Trithioacetone	3475	2334	212-582-5
15.010	29	29926-41-8	2-Acetyl-2-thiazoline	3817	2335	
15.011	29	38205-60-6	5-Acetyl-2,4-dimethylthiazole	3267	2336	253-826-0
15.012	29	1003-04-9	4,5-Dihydrothiophen-3(2H)-one	3266	2337	213-698-9
15.013	29	18640-74-9	2-Isobutylthiazole	3134	11618	242-470-1
15.014	29	137-00-8	5-(2-Hydroxyethyl)-4-methylthiazole	3204	11621	205-272-6
15.015	29	656-53-1	4-Methyl-5-(2-acetoxyethyl)thiazole	3205	11620	211-515-7
15.016	29	95-16-9	Benzothiazole	3256	11594	202-396-2
15.017	29	3581-91-7	4,5-Dimethylthiazole	3274	11606	222-703-3
15.018	29	1759-28-0	4-Methyl-5-vinylthiazole	3313	11633	217-160-4
15.019	29	13623-11-5	2,4,5-Trimethylthiazole	3325	11650	237-107-9
15.020	29	24295-03-2	2-Acetylthiazole	3328	11726	246-134-5
15.021	29	15679-19-3	2-Ethoxythiazole	3340	11611	239-760-5
15.022	29	18277-27-5	2-(sec-Butyl)thiazole	3372	11598	242-154-3
15.023	29	13679-85-1	4,5-Dihydro-2-methylthiophene-3(2H)-one	3512	11601	237-183-3
15.024	29	2530-10-1	3-Acetyl-2,5-dimethylthiophene	3527	11603	219-779-5
15.025	20	23654-92-4	3,5-Dimethyl-1,2,4-trithiolane	3541	11883	245-808-6
15.026	29	15679-13-7	2-Isopropyl-4-methylthiazole	3555		239-758-4

FL No	Synonyms	Systematic name	Comments
14.139			
14.140			
14.141			
14.142			
14.143			
14.144			
14.145	2-Formylpyrrole;		
14.146			2, 3
14.147	1,4-Benzodiazine		
14.148			
14.149			
14.150	2,4,6-collidine		
14.151			
14.152			2, 3, 5
14.153			
14.154	quinine-hydrochloride		2, 3
14.155			2, 3
14.156			
14.157			
14.158	2-methyl-3-(1-methylethoxy)pyrazine		
14.161			
15.001	2-Thionyl mercaptan; 2-Thiophenethiol;		
15.002	5-Methoxy-2-methylthiazole;		
15.004	2-Formyl-5-methylthiophen; 2-Thiophene carboxaldehyde,5-methyl; 2-Thiophenecarbaldehyde,5-methyl-		
15.005			
15.006	2,5-Dimethyl-2,5-dihydroxy-p-dithiane		
15.007	Spiro [dithia-6-methyl-7-oxabicyclo [3.3.0] octane-3,3alpha-(1alpha-oxa-2-methyl)cyclopentane] (isomere component)		
15.008	2,2-Dithiodithiophene; 2,2alpha-Dithiodithiophene		
15.009	2,2,4,4,6,6-Hexamethyl-s-Trithiane	2,2,4,4,6,6-Hexamethyl-1,3,5-trithiane	
15.010	Acetyl thiazoline-2; 2-Acetyl-4,5-dihydrothiazole		
15.011	2,4-Dimethyl-5-acetylthiazole; 2,4-Dimethyl-5-thiazoyl methyl ketone;		
15.012	3-Tetrahydrothiophenone; 3-Thiophenone; Tetrahydrothiophen-3-one; Dihydrothiophenone;		
15.013	Thiazole, 2-isobutyl; 2-Butylthiazole;	2-(2-Methylpropyl)thiazole	
15.014	4-Methyl-5-thiazole ethanol; Sulfuro; 5-Thiazoleethanol, 4-methyl-;		
15.015	4-Methyl-5-thiazoleethanol acetate; 5-Thiazoleethanol, 4-methyl-, acetate;		
15.016			
15.017			
15.018	Thiazole, 4-methyl-5-vinyl;		
15.019			
15.020	Methyl-2-thiazoyl ketone; Ethanone, 1-(2-thiazolyl)-; 2-Thiazolyl methyl ketone		
15.021	2-Thiazolyl ethyl ether; Ethyl 2-thiazolyl ether;		
15.022	2-But-2-ylthiazole; Thiazole, 2-sec-butyl-;	2-(1-Methylpropyl)thiazole	
15.023	2-Methyltetrahydrothiophen-3-one; 2-Methyl-4,5-3-thiophenone; 2-Methylthiolan-3-one; Dihydrothiophenone-3(2H), 2-methyl-;		
15.024	2,5-Dimethyl-3-thienyl methyl ketone; Ethanone, 1-(2,5-dimethyl-3-thienyl)-;		
15.025			
15.026	Thiazole, 2-isopropyl-4-methyl-;		

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
15.027	29	43039-98-1	2-Propionylthiazole	3611		
15.028	29	288-47-1	Thiazole	3615	11642	206-021-3
15.029	29	65894-82-8	2-(sec-Butyl)-4,5-dimethyl-3-thiazoline	3619		265-968-0
15.030	29	76788-46-0	4,5-Dimethyl-2-ethyl-3-thiazoline	3620		278-551-3
15.032	29	65894-83-9	4,5-Dimethyl-2-isobutyl-3-thiazoline	3621		265-969-6
15.033	29	15679-12-6	2-Ethyl 4-methylthiazole	3680	11612	239-757-9
15.034	20	5616-51-3	2-Methyl-1,3-dithiolane	3705		227-038-2
15.035	29	693-95-8	4-Methylthiazole	3716	11627	211-764-1
15.036	20	43040-01-3	3-Methyl-1,2,4-trithiane	3718		256-056-3
15.037	29	13679-72-6	2-Acetyl-3-methylthiophene		11590	237-179-1
15.038	29	7533-07-5	2-Acetyl-4-methylthiazole		11589	
15.039	29	59303-17-2	2-Acetyl-5-methylthiazole			
15.040	29	88-15-3	2-Acetylthiophene		11728	201-804-6
15.041	29	76572-48-0	2-Butyl-4,5-dimethylthiazole			
15.042	30	132344-97-9	2-Butyl-4-methyl(4H)pyrrolidino[1,2d]-1,3,5-dithiazine			
15.043	29	54411-06-2	2-Butyl-5-ethylthiophene		11596	
15.044	29	37645-61-7	2-Butylthiazole		11597	253-577-8
15.045	29	1455-20-5	2-Butylthiophene			215-935-1
15.046	29	34722-01-5	3-Butylthiophene			
15.047	20	92900-67-9	3,5-Di-isobutyl-1,2,4-trithiolane			
15.048	20	54934-99-5	3,5-Di-isopropyl-1,2,4-trithiolane			
15.049	20	54644-28-9	3,5-Diethyl-1,2,4-trithiolane			
15.050	29	41981-71-9	2,5-Diethyl-4-methylthiazole			
15.051	29	4276-68-0	2,5-Diethyl-4-propylthiazole			
15.052	29	15729-76-7	2,5-Diethylthiazole			239-823-7
15.053	29	35686-14-7	3,4-Diethylthiophene			
15.054	30	54717-17-8	Dihydro-2,4,6-triethyl-1,3,5(4H)-dithiazine			
15.055	30	116505-60-3	2,4-Dimethyl(4H)pyrrolidino[1,2e]-1,3,5-dithiazine			
15.056	20	67411-27-2	3,6-Dimethyl-1,2,4,5-tetrathiane			
15.057	30	104691-40-9	4,6-Dimethyl-2-(1-methylethyl)dihydro-1,3,5-dithiazine	3782		
15.058	29	873-64-3	4,5-Dimethyl-2-ethylthiazole			
15.059	29	41981-72-0	4,5-Dimethyl-2-propylthiazole			255-604-9
15.060	29	60755-05-7	2,4-Dimethyl-3-thiazoline			262-405-0
15.061	29	32272-57-4	2,5-Dimethyl-4-ethylthiazole			
15.062	29	541-58-2	2,4-Dimethylthiazole		11605	208-786-9
15.063	29	4175-66-0	2,5-Dimethylthiazole			
15.064	29	638-02-8	2,5-Dimethylthiophene		11609	211-313-9
15.065	29	632-15-5	3,4-Dimethylthiophene		11610	
15.066	20	505-29-3	1,4-Dithiane	3831		208-007-2
15.067	29	32272-48-3	4-Ethyl-2-methylthiazole			
15.068	29	19961-52-5	5-Ethyl-2-methylthiazole			
15.069	29	52414-91-2	4-Ethyl-5-methylthiazole			257-904-5
15.070	29	40323-88-4	2-Ethyl-5-methylthiophene			
15.071	29	15679-09-1	2-Ethylthiazole			239-755-8
15.072	29	872-55-9	2-Ethylthiophene		11614	212-830-2
15.073	29	1795-01-3	3-Ethylthiophene			217-267-6

FL No	Synonyms	Systematic name	Comments
15.027	Thiazole, 2-propionyl-;		
15.028			
15.029	2,5-Dihydro-4,5-dimethyl-2-but-2-ylthiazole	2-(1-Methylpropyl)-4,5-dimethyl-3-thiazoline	
15.030	2-Ethyl-4,5-dimethyl-3-thiazoline;		
15.032	4,5-Dimethyl-2-(2-methylpropyl)-3-thiazoline; 3-Thiazoline, 4,5-dimethyl-2-(2-methylpropyl)-;		
15.033			
15.034			
15.035			
15.036			
15.037	1-(3-methyl-2-thienyl)ethan-1-one?		
15.038			
15.039			
15.040	Methyl 2-thienyl ketone		
15.041			
15.042		4-Butyl-2-methyl-1-aza-3,5-dithiabicyclo[4.3.0]nonane	
15.043			
15.044			
15.045			
15.046			
15.047		3,5-Di(2-methylpropyl)-1,2,4-trithiolane	
15.048			
15.049			
15.050			
15.051			
15.052	Thiazole, 2,5-diethyl-		
15.053			
15.054			
15.055		2,4-Dimethyl-1-aza-3,5-dithiabicyclo[4.3.0]nonane	
15.056			
15.057	2(4)-Isopropyl-4(2),6-dimethyldihydro-4H-1,3,5-dithiazine		
15.058			
15.059			
15.060	2,5-dihydro-2,4-dimethylthiazole		
15.061			
15.062			
15.063			
15.064			
15.065			
15.066	p-Dithiane; 1,4-Dithiocyclohexane; 1,4-Dithiin, tetrahydro-; Diethylene disulfide		
15.067			
15.068			
15.069			
15.070			
15.071			
15.072			
15.073			

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
15.074	29	36880-33-8	5-Ethylthiophene-2-carbaldehyde			253-252-0
15.075	29	65016-61-7	3-Heptylthiophene			
15.076	29	18794-77-9	2-Hexylthiophene		11616	242-579-4
15.077	29	26494-10-0	4-Hydroxy-2,5-dimethylthiophen-3(2H)-one			247-742-3
15.078	29	53498-32-1	2-Isobutyl-4,5-dimethylthiazole		11617	258-586-0
15.079	30	101517-87-7	2-Isobutyldihydro-4,6-dimethyl-1,3,5-dithiazine	3781		
15.080	29	53498-30-9	2-Isopropyl-4,5-dimethylthiazole			
15.081	20	292-46-6	Lenthionine		11619	
15.082	29	7774-73-4	3-Mercaptothiophene			231-880-6
15.083	20	51647-38-2	3-Methyl-1,2,4-trithiolane			
15.084	29	86290-21-3	5-Methyl-2-pentylthiazole			
15.085	29	13679-83-9	4-Methyl-2-propionylthiazole		11622	
15.086	29	2346-00-1	2-Methyl-2-thiazoline			219-071-6
15.087	29	2527-76-6	2-Methyl-3-mercaptothiophene			219-770-6
15.088	29	120-75-2	2-Methyl-4,5-benzothiazole			204-423-3
15.089	29	3581-87-1	2-Methylthiazole		11626	222-702-8
15.090	29	24050-16-6	2-Methylthiazolidine			
15.091	29	554-14-3	2-Methylthiophene		11631	209-063-0
15.092	29	616-44-4	3-Methylthiophene		11632	210-482-6
15.093	29	880-36-4	2-Octylthiophene			212-913-3
15.094	29	53119-25-8	2-Pentanoylthiophene			
15.095	29	102871-31-8	3-Pentylthiophene			
15.096	29	4861-58-9	sec-Pentylthiophene		11634	225-465-9
15.097	29	13679-75-9	2-Propionylthiophene		11635	237-182-8
15.098	29	17626-75-4	2-Propylthiazole			241-606-7
15.099	29	24050-10-0	2-Propylthiazolidine			
15.100	29	1551-27-5	2-Propylthiophene			216-288-8
15.101	29	1518-75-8	3-Propylthiophene			
15.102	20	110-01-0	Tetrahydrothiophene			203-728-9
15.103	20	291-22-5	1,2,4,5-Tetrathiane			
15.104	29	5333-83-5	1-(2-Thienyl)butan-1-one			226-246-0
15.105	29	94089-02-8	1-(2-Thienyl)ethane-1-thiol		11580	302-104-4
15.106	29	110-02-1	Thiophene		11647	203-729-4
15.107	29	98-03-3	Thiophene-2-carbaldehyde		11874	202-629-8
15.108	29	6258-63-5	2-Thiophenemethanethiol			228-394-1
15.109	30	638-17-5	2,4,6-Trimethyldihydro-1,3,5(4H)-dithiazine		11649	
15.110	20	2765-04-0	2,4,6-Trimethyl-1,3,5-trithiane			
15.111	20	289-16-7	1,2,4-Trithiolane			
15.113	30	74595-94-1	5,6-Dihydro-2,4,6, tris(2-methylpropyl)4H-1,3,5-dithiazine			
15.114	30	101417-25-8	5-Acetyl-2,3-dihydro-1,4-thiazine			
15.115	29	61323-24-8	2-Isobutyl-4-methyl thiazole			262-709-3
15.116	29		2-Acetyl-4-ethylthiazole			
15.117	29		2-Isobutyl-4,5-dimethylthiazole			
15.118	29		4-Butylthiazole			
15.119	29		2-Isobutyl-3-thiazoline			
15.121	29		4-Mercapto-2-methyl-4,5-dihydro-thiophene			
15.122	30		2,4,6-Triethyl-1,3,5-trithiazine			
16.001	02	7563-33-9	Ammonium isovalerate	2054	464	231-458-1

FL No	Synonyms	Systematic name	Comments
15.074			
15.075			
15.076			
15.077			
15.078		4,5-Dimethyl-2-(2-methylpropyl)thiazole	
15.079	2(4)-Isobutyl-4(2),6-dimethyldihydro-4H-1,3,5-dithiazine	2-(2-Methylpropyl)dihydro-4,6-dimethyl-1,3,5-dithiazine	
15.080			
15.081		1,2,3,5,6-Pentathiacycloheptane	
15.082	Thiophene-3-thiol		
15.083			
15.084			
15.085			
15.086			
15.087	2-methylthiophene-3-thiol		
15.088	2-methylbenzothiazole		
15.089			
15.090			
15.091			
15.092			
15.093			
15.094			
15.095			
15.096		1-Methylbutylthiophene	
15.097	2-Propanoylthiophene		
15.098			
15.099			
15.100			
15.101			
15.102	thiacyclopentane-; thiophan-; tetramethylene-sulfide-		
15.103			
15.104	2-Butylthiophene		
15.105	1-(2-Thienyl)ethylmercaptan		
15.106			
15.107	2-Formylthiophene		
15.108	Thenyl mercaptan		
15.109	Thialdine		
15.110			
15.111			
15.113			
15.114			
15.115		2-(2-Methylpropyl)-4-methylthiazole	
15.116			
15.117		2-(2-Methylpropyl)-4,5-dimethylthiazole	
15.118			
15.119		2-(2-Methylpropyl)-2,5-dihydrothiazole	
15.121			
15.122			
16.001	Isovaleric acid, ammonium salt; Ammonium 3-methylbutanoate; Butanoic acid, 3-methyl-, ammonium salt	Ammonium 3-methylbutanoate	

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
16.002	30	12135-76-1	Diammonium sulfide	2053	482	2351843
16.006	19	2444-46-4	N-Nonanoyl 4-hydroxy-3-methoxybenzylamide	2787	590	219-484-1
16.007	30	7783-06-4	Hydrogen sulfide	3779	647	231-977-3
16.009	30	7664-41-7	Ammonia		739	231-635-3
16.012	30		Glycyrrhizic acid	2528	2221	215-785-7
16.013	19	39711-79-0	N-Ethyl-2-isopropyl-5-methylcyclohexane carboxamide	3455	2298	254-599-0
16.014	19	404-86-4	N-(4-Hydroxy-3-methoxybenzyl)-8-methylnon-6-enamide	3404	2299	206-969-8
16.015	32	77-83-8	Ethyl methylphenylglycidate	2444	6002	201-061-8
16.016	30	58-08-2	Caffeine	2224	11741	200-362-1
16.017	30	109-95-5	Ethyl nitrite	2446	11869	203-722-6
16.018	32	121-39-1	Ethyl 3-phenyl-2,3-epoxypropionate	2454	11844	204-467-3
16.027	29	67-03-8	Thiamine hydrochloride	3322	10493	200-641-8
16.030	20	67715-80-4	2-Methyl-4-propyl-1,3-oxathiane	3578	11540	
16.032	30	83-67-0	Theobromine	3591		201-494-2
16.039	30		Potassium 2-(1'-ethoxy)ethoxypropanoate	3752		
16.040	32	74367-97-8	Ethyl 2,3-epoxy-3-methyl-3-p-tolylpropionate	3757	11707	277-844-3
16.041	22	13794-15-5	Sodium 2-(4-methoxyphenoxy)propionate	3773		
16.042	32	18383-49-8	Carvone-5,6-oxide		10501	
16.043	32	1139-30-6	beta-Caryophyllene epoxide		10500	214-519-7
16.044	32	35178-55-3	Piperitenone oxide		10508	
16.047	19	60-35-5	Acetamide			200-473-5
16.048	30	12125-02-9	Ammonium chloride			235-186-4
16.049	19	541-35-5	Butyramide			208-776-4
16.050	30	5146-66-7	3,7-Dimethylocta-2,6-dienitrile			225-918-0
16.051	32	38284-11-6	Epoxy oxophorone			
16.052	19	105-60-2	1,6-Hexalactam			203-313-2
16.053	30	51115-67-4	2-Isopropyl- N,2,3-trimethylbutanamide	3804	10459	256-974-4
16.054	16	65416-59-3	6-Methylene-2,10,10-trimethyl-1-oxaspiro[4.5]dec-7-ene			
16.055	11	564-20-5	Sclareolide	3794		209-269-0
16.056	34	107-35-7	Taurine	3813		203-483-8
16.057	20	72472-02-7	2,4,4-Trimethyl-1,3-oxathiane			
16.058	25	10236-47-2	Naringin	2769	10286	233-566-4
16.059	30	12124-99-1	Ammonium hydrogen sulphide	2053	482	235-184-3
16.060	30	53956-04-0	Glycyrrhizic acid, ammoniated	2528	2221	258-887-7
16.061	30	20702-77-6	Neohesperidine dihydrochalcone	3811		243-978-6
16.062	20	59324-17-3	trans-2-Methyl-4-propyl-1,3-oxathiane			261-700-1
16.064	07	52104-11-7	Caryolanol-1			
16.065	23		4-(beta-D-glucopyranosyloxy)-3-methoxy-benzaldehyde			
16.066	30	34625-23-5	Ethyl-D-glucopyranoside			252-122-0
16.067	30	18604-50-7	2-Methoxy-4-(2-propenyl)phenyl-beta-D-glucopyranoside			
16.068	30	100-47-0	Benzonitrile			202-855-7

FL No	Synonyms	Systematic name	Comments
16.002	Ammonium monosulfide		1, 5
16.006	Pelargonyl vanillylamide; N-(4-Hydroxy-3-methoxybenzyl)nonanamide; n-Nonanoyl vanillylamide		
16.007			
16.009			4
16.012	Glycyrrhizin		3, 5
16.013	N-Ethyl-p-menthane-3-carboxamide		
16.014	Capsaicin; 8-Methylnon-6-enoyl 4-hydroxy-3-methoxybenzylamide; tr-8-methyl-N-vanillyl-6-nonenamide; Isodecenoic acid vanillylamide;		
16.015	Ethyl alpha,beta-epoxy-beta-methylphenylpropionate; Strawberry aldehyde; Aldehyde C-16;	Ethyl 2,3-epoxy-3-methyl-3-phenylbutanoate	
16.016		1,3,7-trimethyl-2,6-dioxopurine	2, 3
16.017	Nitrous ether;		4
16.018	Ethyl alpha,beta-epoxy-alpha-phenylpropionate; Ethyl 3-phenylglycidate;		
16.027	Vitamin B1;	3-((4-amino-2-methyl-5-pyrimidinyl)methyl)-5-(2-hydroxyethyl)-4-methyl-thiazolium chloride	1, 3
16.030	1,3-Oxathiane, 2-methyl-4-propyl-		
16.032	3,7-Dihydro-3,7-dimethyl-1h-purine-2,6-dione; 3,7-Dimethylxanthine; 1H-purine-2,6-dione, 3,7-dihydro-3,7-dimethyl;	3,7-Dihydro-3,7-dimethyl-1H-purine-2,6-dione	2, 3
16.039			
16.040	Ethyl methyl-p-tolylglycidate; Ethyl methyl-p-methylphenylglycidate;	Ethyl 2,3-epoxy-3-(4-methylphenyl)butanoate	
16.041			
16.042		5,6-Epoxy-p-menth-8-en-2-one	
16.043	beta-Caryophyllene oxide	4,5-Epoxy-4,12,12-trimethyl-8-methylene-bicyclo[8.2.0]dodecane	
16.044		1,2-Epoxy-p-menth-4(8)-en-3-one	
16.047			
16.048			
16.049	Butanamide		
16.050			
16.051	1,3,3-Trimethyl-7-oxabicyclo[4.1.0] heptane-2,5-dione	2,3-epoxy-2,6,6-trimethyl-1,4-cyclohexanedione	
16.052			
16.053	2-Isopropyl-N,2,3-trimethylbutyramide; N,2,3-trimethyl-2-isopropylbutanamide		
16.054	Vitispirane		
16.055	Norambrienolide; Decahydro-tetramethylnaphtho-furanone	3a,6,6,9a-Tetramethyldecahydronaphtho(2,1b) furan-1-one	
16.056		2-Aminoethanesulfonic acid	1, 3
16.057			
16.058			
16.059			1, 5
16.060			1, 3, 5
16.061			4
16.062			
16.064			
16.065			
16.066			
16.067			
16.068			4

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs
16.069	30	85-32-5	Guanilic acid			
16.070	32		7,15-Epoxy-3-caryophyllene			
16.071	32		4,5-Epoxydec-2(trans)-enal			
16.073	01		Sodium diacetate	3900		
16.075	23		Ethyl vanillin beta-D-glucopyranoside	3801		
16.077	20		2-(2-Methyl-1-propenyl)-4,4-dimethyl-1,3-oxathiane			
16.078	34		Lycine hydrochloride			
16.079	25		4-(p-hydroxyphenyl)-2-butanone-beta-D-glucopyranoside			
16.080	30	72401-53-7	Tannic acid	3042		276-638-0
16.081	30	126-14-7	Sucrose octaacetate	3038	11819	204-772-1
17.001	34	107-95-9	beta-Alanine	3252		203-536-5
17.002	34	56-41-7	l-Alanine	3818	11729	200-273-8
17.003	34	74-79-3	l-Arginine	3819	11890	200-811-1
17.004	34	3130-87-8	Asparagine		516	221-521-1
17.005	34	56-84-8	Aspartic acid	3656	10078	200-291-6
17.006	34	56-89-3	Cystine		11747	200-296-3
17.007	34	56-85-9	Glutamine	3684		200-292-1
17.008	34	71-00-1	l-Histidine	3694		200-745-3
17.009	34	36901-87-8	4-Hydroxyproline			
17.010	34	443-79-8	d,l-Isoleucine	3295	10127	207-139-8
17.011	34	595-39-1	Isovaline			
17.012	34	61-90-5	l-Leucine	3297	10482	200-522-0
17.013	34	70-54-2	DL-Lysine	3847	11947	200-740-6
17.014	34	59-51-8	d,l-Methionine	3301	569	200-432-1
17.015	34	1115-84-0	S-Methylmethioninesulphonium chloride	3445	761	214-231-1
17.016	34	3184-13-2	l-Ornithine monochlorohydrate			221-678-6
17.017	34	150-30-1	DL-Phenylalanine	3726	10488	205-756-7
17.018	34	63-91-2	l-Phenylalanine	3585	10488	200-568-1
17.019	34	147-85-3	l-Proline	3319	10490	205-702-2
17.020	34	302-84-1	Serine			206-130-6
17.021	34	80-68-2	Threonine			201-300-6
17.022	34	60-18-4	l-Thyrosine	3736		200-460-4
17.023	34	516-06-3	DL-Valine	3444		208-220-0
17.024	34	302-72-7	DL-Alanine	3818	11729	206-126-4
17.026	34	56-87-1	l-Lysine	3847	11947	200-294-2
17.027	34	63-68-3	l-Methionine	3301		200-562-9
17.028	34	72-18-4	l-Valine	3444		200-773-6
17.030	34	73-32-5	l-iso Leucine			200-798-2
17.031	34	657-27-2	l-Lysine monochlorhydrate			
17.032	34	52-89-1	l-Cysteine hydrochloride		11746	200-157-7
17.033	34	52-90-4	l-Cysteine	3263	10464	200-158-2
17.034	34	56-40-6	Glycine	3287	11771	200-272-2

FL No	Synonyms	Systematic name	Comments
16.069			
16.070			
16.071			
16.073	Sodium ethanoate		
16.075			
16.077			
16.078			
16.079			
16.080		D-glucose pentakis[3,4-dihydroxy-5-[(trihydroxy-3,4,5-benzoyloxy]benzoate]	
16.081	Octaacetylsucrose; Octaacetyl sucrose		
17.001		3-Aminopropanoic acid	1, 3
17.002		2-Aminopropanoic acid	1, 3
17.003	(S)-2-Amino-5-guanidinovaleric acid; Arginine; 2-Amino-5-guanidinovaleric acid		1, 3
17.004			1, 3
17.005		2-Aminobutanedioic acid	1, 3
17.006			1, 3, 5
17.007			1, 3
17.008			1, 3
17.009		4-Hydroxy pyrrolidine-2-carboxylic acid	
17.010		2-Amino-3-methylpentanoic acid	1, 3
17.011	2-amino-2-methylbutyric acid	2-Amino-2-methylbutanoic acid	1, 3
17.012			1, 3
17.013			1, 3, 5
17.014	D,L-Methionine; alpha-Amino-gamma-methyl thio-n-butyric acid; 2-Amino-4-(methyl thio)-butanoic acid	2-Amino-4-(methylthio)butanoic acid	1, 3
17.015	Vitamin U; DL-(3-Amino-3-carboxypropyl)dimethylsulphonium chloride		
17.016			1, 3
17.017			1, 3
17.018			1, 3
17.019		Pyrrolidine-2-carboxylic acid	1, 3
17.020		2-Amino-3-hydroxypropanoic acid	1, 3
17.021		2-Amino-3-hydroxybutanoic acid	1, 3
17.022			1, 3
17.023		2-Amino-3-methylbutanoic acid	1, 3
17.024	L-alpha-Alanine; (S)-2-Aminopropanoic acid; L-alpha-Aminopropionic acid; DL-Alanine; DL-2-Aminopropanoic acid		1, 3, 5
17.026	Lysine; (S)-2,6-Diaminohexanoic acid; alpha, epsilon-Diaminocaproic acid		1, 3
17.027			1, 3, 5
17.028			1, 3, 5
17.030			1, 3
17.031			1, 3, 5
17.032			1
17.033			1
17.034			1

PART B

**FLAVOURING SUBSTANCES NOTIFIED IN APPLICATION OF ARTICLE 3(2) OF REGULATION (EC)
No 2232/96, FOR WHICH THE PROTECTION OF THE INTELLECTUAL PROPERTY RIGHTS OF THE
MANUFACTURER HAS BEEN REQUESTED**

Code	Date of receipt of the notification by the Commission
CN003	17.10.1998
CN004	17.10.1998
CN009	17.10.1998
CN010	17.10.1998
CN012	17.10.1998
CN013	17.10.1998
CN014	17.10.1998
CN016	17.10.1998
CN019	17.10.1998
CN022	17.10.1998
CN023	17.10.1998
CN030	17.10.1998
CN031	17.10.1998
CN033	17.10.1998
CN035	17.10.1998
CN036	17.10.1998
CN037	17.10.1998
CN042	17.10.1998
CN045	17.10.1998
CN048	17.10.1998
CN049	17.10.1998
CN050	17.10.1998
CN052	17.10.1998
CN053	17.10.1998
CN054	17.10.1998
CN057	17.10.1998
CN058	30.10.1998
CN059	18.9.1998
CN060	26.10.1998
CN061	26.10.1998
CN064	3.2.1999
CN065	26.1.2001'

II

(Acts whose publication is not obligatory)

COMMISSION

COMMISSION DECISION

of 7 April 2004

amending Decision 1999/217/EC as regards the register of flavouring substances

(notified under document number C(2004) 1273)

(Text with EEA relevance)

(2004/357/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs ⁽¹⁾, as amended by Regulation (EC) No 1882/2003 ⁽²⁾, and in particular Article 3(2) thereof,

Whereas:

(1) Regulation (EC) No 2232/96 lays down the procedure for the establishment of rules in respect of flavouring substances used or intended to be used in foodstuffs. That Regulation provides for the adoption of a register of flavouring substances ('the register') following notification by the Member States of a list of the flavouring substances which may be used in or on foodstuffs marketed in their territory and on the basis of scrutiny by the Commission of that notification.

(2) In addition, Regulation (EC) No 2232/96 provides for a programme of evaluation of the flavouring substances contained in the register ('the evaluation programme') in order to check if those substances comply within the general criteria for their use set out in the Annex to that Regulation. Regulation (EC) No 2232/96 provides that the persons responsible for placing the flavouring substances on the market are to forward data necessary

for their evaluation to the Commission. That Regulation also provides that following completion of the evaluation programme, the list of flavouring substances the use of which is to be authorised to the exclusion of others, is to be adopted.

(3) Pursuant to Regulation (EC) No 2232/96, Commission Decision 1999/217/EC of 23 February 1999 adopting a register of flavouring substances used in or on foodstuffs drawn up in application of Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996 ⁽³⁾, as last amended by Decision 2002/113/EC ⁽⁴⁾, adopted a register of flavouring substances used in or on foodstuffs.

(4) Commission Regulation (EC) No 1565/2000 of 18 July 2000 laying down the measures necessary for the adoption of an evaluation programme in application of Regulation (EC) No 2232/96 of the European Parliament and of the Council ⁽⁵⁾, provides for certain information to be submitted by the person responsible for placing certain flavouring substances contained in the register on the market in order to enable the evaluation of the substance to be carried out.

(5) Commission Regulation (EC) No 622/2002 of 11 April 2002 establishing deadlines for the submission of information for the evaluation of chemically defined flavouring substances used in or on foodstuffs ⁽⁶⁾, established time limits for the submission of information for the evaluation of flavouring substances as required

⁽¹⁾ OJ L 299, 23.11.1996, p. 1.

⁽²⁾ OJ L 284, 31.10.2003, p. 1.

⁽³⁾ OJ L 84, 27.3.1999, p. 1.

⁽⁴⁾ OJ L 49, 20.2.2002, p. 1.

⁽⁵⁾ OJ L 180, 19.7.2000, p. 8.

⁽⁶⁾ OJ L 95, 12.4.2002, p. 10.

- pursuant to Regulation (EC) No 1565/2000. However, for a number of substances for which the deadline of 31 December 2002 had been established, no information has been submitted nor has the Commission been informed about any intention to still submit information. Therefore, these substances cannot be evaluated in respect of their compliance with the general criteria for the use of flavouring substances set out in Regulation (EC) No 2232/96 before the completion of the evaluation programme. Accordingly, it is appropriate to delete these substances from the register.
- (6) Scrutiny of the flavouring substances listed in the register revealed inconsistencies concerning the names of certain substances (FL No 06.100, and FL No 06.131) and also concerning certain chemical numbers (FL No 02.027, FL No 07.033, FL No 07.153, and FL No 09.578). In addition, cases were identified where the same substance appeared under different chemical names in the register (FL No 02.228 and FL No 02.027; FL No 07.221 and FL No 07.033). Those inconsistencies should be rectified.
- (7) Scrutiny by the Commission also revealed that of the different forms of quinine only quinine hydrochloride (FL No 14.011), quinine monohydrochloride dihydrate (FL No 14.155) and quinine sulphate (FL No 14.152) are used as flavouring substances. The other forms of quinine (FL No 14.146 and FL No 14.154) should therefore be deleted from the register.
- (8) The Scientific Committee on Food concluded in its opinion of 26 February 2002 that N-(4-hydroxy-3-methoxybenzyl)-8-methylnon-6-enamide (capsaicin, FL No 16.014) is genotoxic. Capsaicin is naturally present in *Capsicum* species (e.g. chilli, cayenne pepper, red pepper). High consumption of chillies has been reported to be a risk factor for cancer. Although the maximum daily intake in the European Union is much lower than the intake levels associated with cancer, the addition of capsaicin as such to food should be avoided, as it does not comply with the general criteria for the use of flavouring substances set out in the Annex to Regulation (EC) No 2232/96. Accordingly, that substance should be deleted from the register.
- (9) For two substances listed in the register (CN060 and CN061), the notifying Member State has withdrawn its notification. Those substances should therefore be deleted from the register.
- (10) It is not appropriate to maintain the confidential code of substances that otherwise have been notified with their full name and were on the market at the moment the register was elaborated.
- (11) The industry has now provided information concerning certain substances which are indicated with the number 4 in the column 'comments' of part A of the Annex to Decision 1999/217/EC and for which additional information was required under that Decision. In particular, evidence was provided that those substances are flavouring substances. Accordingly, that Annex should be amended to delete the reference to number 4.
- (12) It is appropriate to make a correction to the register by giving a Flavis number to some substances that were on the market at the moment the register was elaborated to ensure that they are correctly taken up in the evaluation programme.
- (13) Member States have notified new flavouring substances to be included in the evaluation programme and they should therefore be incorporated into the register.
- (14) For some newly notified substances, in application of Regulation (EC) No 2232/96 and Commission Recommendation 98/282/EC of 21 April 1998 on the ways in which the Member States and signatory States to the Agreement on the European Economic Area should protect intellectual property in connection with the development and manufacture of flavouring substances referred to in Regulation (EC) No 2232/96 of the European Parliament and of the Council⁽¹⁾, the notifying Member State requested designation in such a way as to protect the intellectual property rights of their manufacturer. Those substances should therefore be listed in part B of the Annex to Decision 1999/217/EC.
- (15) Decision 1999/217/EC should therefore be amended accordingly.
- (16) The measures provided for in this Decision are in accordance with the opinion of the Standing Committee on the Food Chain and Animal Health,

HAS ADOPTED THIS DECISION:

Article 1

The Annex to Decision 1999/217/EC is amended in accordance with the Annex to this Decision.

⁽¹⁾ OJ L 127, 29.4.1998, p. 32.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 7 April 2004.

For the Commission
David BYRNE
Member of the Commission

ANNEX

The Annex to Decision 1999/217/EC is amended as follows:

1. in the list in the third paragraph of the introductory part of the Annex which precedes part A, the following point 6 is added:

'6. Substance which may not be used in and on food, unless lawfully placed on the market in the Member State(s) concerned.'

2. part A is amended as follows:

- (a) the entries for the substances attributed with the FL-Nos referred to in points (i) to (vi) are amended as follows:

- (i) for FL No 02.027, the entry '141-25-3' in the column 'CAS' is replaced by the entry '6812-78-8' and the entry '205-473-9' in the column 'Einecs' shall be replaced by '229-887-4';
- (ii) for FL No 06.100, the entry 'Acetaldehyde dipentyl acetal' in the column 'Name' is replaced by the entry '1,1-dipentyloxyethane';
- (iii) for FL No 06.131, the entry '1-Ethoxy-3-methyl-1-isopentyloxybutane' in the column 'Name' is replaced by the entry '1-ethoxy-1-(3-methylbutoxy)-3-methylbutane';
- (iv) for FL No 07.033, the entry '95-41-0' in the column 'CAS' is replaced by the entry '11050-62-7';
- (v) for FL No 07.153, the entry '1803-39-0' in the column 'CAS' is replaced by the entry '20489-53-6';
- (vi) for FL No 09.578, the entry '19089-92-0' in the column 'CAS' is replaced by the entry '1617-25-0';
- (vii) for FL No 12.201, the entry '57074-34-7' in the column 'CAS' is replaced by the entry '94293-57-9';

- (b) the rows set out in the table for the substances attributed with the following FL-numbers are deleted:

'02.046	02.143	02.158	02.161	02.169	02.179	02.220	02.225
02.228	02.241	05.086	05.138	05.145	05.151	05.161	05.162
05.163	05.165	05.168	05.181	05.206	06.056	06.093	06.110
06.112	07.006	07.037	07.073	07.155	07.166	07.186	07.197
07.209	07.218	07.221	07.222	07.227	08.077	08.084	08.091
08.105	08.106	08.118	08.122	08.124	08.125	09.172	09.175
09.190	09.224	09.226	09.320	09.322	09.336	09.338	09.343
09.344	09.359	09.361	09.366	09.373	09.376	09.378	09.393
09.497	09.577	09.591	09.597	09.610	09.622	09.627	09.628
09.630	09.653	09.828	09.849	09.856	09.863	09.868	09.883
09.889	09.890	12.011	12.090	12.091	12.105	12.119	12.131
12.133	12.140	12.144	12.160	12.184	12.185	12.190	12.204
12.213	12.215	12.219	12.220	12.225	12.229	14.146	14.154
16.014	16.077	17.004	17.011	17.016	17.030'		

- (c) for the substances attributed with the following FL-Nos, the number '4' in the column 'comments' in the table is deleted:

'02.004	02.121	02.216	02.217	09.016	09.034	09.367	09.712
16.009	16.017'						

(d) the following rows are inserted in the table:

FL No	Chemical group	CAS	Name	FEMA	Einecs	Synonyms	Comments
02.243	04	56805-23-3	(E)-3-(Z)-6-Nonadien-1-ol	3884	278-518-3		6
04.095	25	527-60-6	2,4,6-Trimethyl phenol		208-419-2		6
04.096	18	579-60-2	2-Methoxy-6-(2-propenyl)phenol		209-444-1		6
05.207	04	105683-99-6	6-Decenal, cis				6
05.208	04	169054-69-7	Z-8-Tetradecenal				6
05.209	04	147159-48-6	6-Decenal, trans				6
06.132	23	63253-24-7	Vanillin butan-2,3-diol acetal (mixture of stereo isomers)	4023		Vanillin erythro and threo-butan-2,3-diol acetal	6
05.217	04	21662-08-8	5-Decenal				
05.218	04	56554-87-1	16-Octadecenal				
07.239	05	2278-53-7	[R-(E)]-5-Isopropyl-8-methylnona-6,8-dien-2-one		218-907-7		6
07.240	05	13019-20-0	2-Methylheptan-3-one	4000	235-877-0		6
07.241	05	1635-02-5	3,4-Dimethylhex-3-en-2-one		216-656-8		6
07.242	21	5355-63-5	3-Hydroxy-4-phenylbutane-2-one				6
07.243	21	99-93-4	4-Hydroxy acetophenone		202-802-8		6
07.244	05	20859-10-3	Trans-6-Methyl-3-hepten-2-one	4001			6
07.245	08	71048-82-3	Trans-delta-damascone		275-156-8	(1alpha(E),2beta) - 1-(2,6,6-trimethyl-cyclohex-3-en-1-yl)but-2-en-1-one	6
07.246	08	25304-14-7	Dimethyl cyclohexyl methyl ketone		246-799-1		6
07.247	05	30086-02-3	Octadien-2-one/3,5- (E,E)	4008			6

FL No	Chemical group	CAS	Name	FEMA	Einecs	Synonyms	Comments
07.248	10	585-25-1	Octan-2,3-dione		209-552-9		6
07.249	05	927-49-1	Undecan-6-one	4022	213-150-9		6
07.253	05	30086-02-3	3,5-Octadiene-2-one				
09.917	04	1576-85-8	4-Pentenyl acetate	4011	216-413-6		6
09.918	04	67452-27-1	Cis-4-decenyl acetate	3967			6
09.919	09	139564-43-5	Ethyl 3-acetoxy-2-methylbutyrate				6
09.920	08	156324-82-2	2-Isopropyl-5-methylcyclohexyl oxycarbonyloxy-2-hydroxypropane	3992	417-420-9		6
09.921	04	54653-25-7	Ethyl 5-hexenoate	3976			6
09.922	04	39924-27-1	Ethyl cis-4-heptenoate	3975	254-702-9		6
09.923	05	39026-94-3	Hept-2-yl butyrate	3981			6
09.924	05	5921-83-5	(+/-)-3-Heptyl acetate	3980	203-932-8		6
09.925	05	60826-15-5	Nonan-3-yl acetate	4007	262-444-3		6
09.926	05	84434-65-1	Octan-3-yl formate	4009	282-866-1		6
09.927	04	141-15-1	Rhodinyl butyrate	2982	205-462-9		6
09.928	04	3681-82-1	Trans-3-hexenyl acetate		222-962-2		6
10.069	09	67663-01-8	3-Methyl gamma-decalactone	3999			6
10.070	09	1073-11-6	4-Methyl-5-hexen-1,4-olide		214-024-6		6
12.238	20	227456-27-1	3-Mercapto-2-methylpentan-1-ol	3996			6
12.239	20	227456-28-2	3-Mercapto-2-methylpentanal	3994			6
12.240	20	6540-86-9	2,4,6-Trithiaheptane				6

FL No	Chemical group	CAS	Name	FEMA	Einecs	Synonyms	Comments
12.241	20	258823-39-1	2-Mercapto-2-methylpentan-1-ol	3995			6
12.242	20	29414-47-9	Methylthiomethylmercaptan				
12.243	20	6725-64-0	Dimercaptomethane				6
12.244	20	14109-72-9	1-Methylthio-2-propanone	3882			6
12.245	20	7529-06-8	1,3-Dimercapto-2-thiopropane				6
12.246	20		1-(Methylthio) hexan-3-one				6
12.247	20	61837-77-2	1-(Methylthio) octan-3-one				6
12.248	20	5862-47-5	2-(Methylthio) ethyl acetate				6
12.249	20	227456-27-1	3-Mercapto-2-methylpentanol (mixture of stereo isomers)	3996			6
12.250	20	51755-72-7	3-Mercaptohexanal				6
12.251	20	136954-22-8	3-Mercaptohexyl hexanoate	3853			6
12.252	20	31539-84-1	4-Mercapto-4-methyl-2-pentanol				6
12.253	20	72437-68-4	Amyl methyl disulfide				6
12.254	20	63986-03-8	Butyl ethyl disulfide				6
12.255	20	156472-94-5	Ethyl 3-mercaptopbutyrate	3977			6
12.256	20	31499-70-4	Ethyl propyl trisulfide				6
12.257	20	104228-51-5	Ethyl 4-(acetylthio) butyrate	3974			6
12.259	20	29725-66-4	p-menthan-3-one, 1 mercapto				6
13.191	14	376595-42-5	O-Ethyl S-(2-furylmethyl)thiocarbonate				6
13.192	14	109537-55-5	Furfuryl 2-methyl-3-furyldisulfide				6

FL No	Chemical group	CAS	Name	FEMA	Einecs	Synonyms	Comments
13.193	14	26486-21-5	2,5-Dimethyltetrahydro-3-furanthiol	3971			6
13.194	14	252736-39-3	2,5-Dimethyltetrahydro-3-furyl thioacetate	3972			6
13.195	30	26131-91-9	2-Isobutyl-4,5-dimethyl oxazole				6
13.196	14	180031-78-1	4-(Furfurylthio) pentan-2-one	3840			6
13.197	14	252736-36-0	Furyl propyldisulfide	3979			6
14.162	28	98-79-3	L-2-Pyrrolidone-5-carboxylic acid				6
14.163	28	1192-58-1	1-Methylpyrrole-2-carboxaldehyde		214-755-0		6
14.164	28	622-39-9	2-Propylpyridine		210-732-4		6
14.165	28	2168-14-8	N-ethyl-2-formylpyrrole				6
15.123	20	53897-58-5	2,4,6-Triethyl-1,3,5-trithiane				6
16.082	30	21018-84-8	Amarogentin				6

3. the table of part B is replaced by the following:

'Flavouring substances notified in application of Article 3(2) of Regulation (EC) No 2232/96, for which the protection of the intellectual property rights of the manufacturer has been requested

Code	Date of receipt of the notification by the Commission	Comments
CN003	17.10.1998	
CN004	17.10.1998	
CN009	17.10.1998	
CN010	17.10.1998	
CN012	17.10.1998	
CN013	17.10.1998	
CN014	17.10.1998	
CN016	17.10.1998	
CN019	17.10.1998	
CN022	17.10.1998	
CN023	17.10.1998	
CN030	17.10.1998	
CN033	17.10.1998	
CN035	17.10.1998	
CN036	17.10.1998	
CN037	17.10.1998	
CN042	17.10.1998	
CN045	17.10.1998	
CN048	17.10.1998	
CN049	17.10.1998	
CN050	17.10.1998	
CN052	17.10.1998	
CN053	17.10.1998	
CN054	17.10.1998	
CN057	17.10.1998	
CN058	30.10.1998	
CN059	18.9.1998	
CN064	3.2.1999	
CN065	26.1.2001	
CN074	18.4.2003	6
CN075	18.4.2003	6
CN076	18.4.2003	6'

COMMISSION DECISION

of 18 May 2005

amending Decision 1999/217/EC as regards the register of flavouring substances used in or on foodstuffs

(notified under document number C(2005) 1437)

(Text with EEA relevance)

(2005/389/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs⁽¹⁾, and in particular Article 3(2) and Article 4(3) thereof,

Whereas:

- (1) Regulation (EC) No 2232/96 lays down the procedure for the establishment of rules in respect of flavouring substances used or intended to be used in foodstuffs. That Regulation provides for the adoption of a register of flavouring substances (the register) following notification by the Member States of a list of the flavouring substances which may be used in or on foodstuffs marketed in their territory and on the basis of scrutiny by the Commission of that notification. That register was adopted by Commission Decision 1999/217/EC⁽²⁾.
- (2) In addition, Regulation (EC) No 2232/96 provides for a programme for the evaluation of flavouring substances in order to check whether they comply with the general criteria for the use of flavouring substances set out in the Annex to that Regulation.
- (3) The European Food Safety Authority (the Authority) concluded in its opinion of 13 July 2004 on para-hydroxybenzoates, that propyl 4-hydroxybenzoate (FL 09.915) had effects on sex hormones and the male reproductive organs in juvenile rats. The Authority was unable to recommend an acceptable daily intake (ADI) for this substance because of the lack of clear no-observed-adverse-effect-level (NOAEL). The use of propyl 4-hydroxybenzoate as a flavouring substance in food is not acceptable, as it does not comply with the general criteria for the use of flavouring substances set out in

the Annex to Regulation (EC) No 2232/96. As a consequence, propyl 4-hydroxybenzoate should be deleted from the register.

- (4) The Authority concluded in its opinion of 7 December 2004 on aliphatic dialcohols, diketones and hydroxyketones, that pentane-2,4-dione (FL 07.191) is genotoxic *in vitro* and *in vivo*. Accordingly, its use as a flavouring substance is not acceptable, because it does not comply with the general criteria for the use of flavouring substances set out in the Annex to Regulation (EC) No 2232/96. As a consequence, pentane-2,4-dione should be deleted from the register.
- (5) In application of Regulation (EC) No 2232/96 and Commission Recommendation 98/282/EC of 21 April 1998 on the ways in which the Member States and the signatory States to the Agreement on the European Economic Area should protect intellectual property in connection with the development and manufacture of flavouring substances referred to in Regulation (EC) No 2232/96 of the European Parliament and of the Council⁽³⁾, for a number of substances, the notifying Member States requested that they should be registered in such a way as to protect the intellectual property rights of the manufacturer.
- (6) Protection for these substances, listed in Part B of the register, is limited to a maximum period of five years following the date of receipt of the notification. That period has now expired for 28 substances which should consequently be transferred to Part A of the register.
- (7) Decision 1999/217/EC should therefore be amended accordingly.
- (8) The measures provided for in this Decision are in accordance with the opinion of the Standing Committee on the Food Chain and Animal Health,

⁽¹⁾ OJ L 299, 23.11.1996, p. 1. Regulation as amended by Regulation (EC) No 1882/2003 (OJ L 284, 31.10.2003, p. 1).

⁽²⁾ OJ L 84, 27.3.1999, p. 1. Decision as last amended by Decision 2004/357/EC (OJ L 113, 20.4.2004, p. 28).

⁽³⁾ OJ L 127, 29.4.1998, p. 32.

HAS ADOPTED THIS DECISION:

Article 1

The Annex to Decision 1999/217/EC is amended in accordance with the Annex to this Decision.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 18 May 2005.

For the Commission
Markos KYPRIANOU
Member of the Commission

ANNEX

The Annex to Decision 1999/217/EC is amended as follows:

1. Part A is amended as follows:

(a) The rows set out in the table for the substances attributed with FL-numbers 07.191 (pentane-2,4-dione) and 09.915 (propyl 4-hydroxybenzoate) are deleted.

(b) The following rows are inserted in the table:

FL No	Chemical group	CAS	Name	Fema	Einecs	Synonyms	Comments
01.070	31	111-66-0	1-Octene		203-893-7		
01.071	31	111-67-1	2-Octene		203-894-2		
01.072	31	544-76-3	Hexadecane		280-878-9		
07.251	21	577-16-2	Methylacetophenone				CAS No corresponds to 2-methylacetophenone
01.073	31	592-99-4	4-Octene				
01.074	31	593-45-3	Octadecane		209-790-3		
16.084	30	627-67-8	3-Methyl-1-nitrobutane		211-008-0		
01.075	31	629-78-7	Heptadecane		211-108-4		
12.260	20	4131-76-4	Methyl-2-methyl-3-mercaptopropionate		223-949-4		
12.261	20	6725-64-0	Methanedithiol				
01.076	31	20996-35-4	3,7-Decadiene				
16.085	20	27959-66-6	4,4-Dimethyl-1,3-oxathiane				
12.262	20	29414-47-9	(Methylthio)methanethiol				
05.210	04	30390-51-3	4-Dodecenal		250-174-9		
05.211	02	30689-75-9	6-Methyloctanal				
14.166	30	32536-43-9	Indole acetic acid				
07.252	05	33665-27-9	4-Octen-2-one				
02.244	04	54393-36-1	4-Octen-1-ol				
10.070	09	57681-53-5	4-Hydroxy-2-heptenoic acid lactone		260-902-7		
05.212	04	76261-02-4	6-Dodecenal				
05.213	04	90645-87-7	5-Nonenal				
15.124	29	103527-75-9	3-Methyl-2-butenylthiophene			Rose thiophene	
05.214	04	121052-28-6	8-Dodecenal				
05.215	03	134998-59-7	2,6-Decadienal (c,c)				
05.216	03	134998-60-0	2,6-Decadienal (t,t)				
12.263	20		3-Mercapto-3-methylbutanal				
12.264	20	92585-08-5	4,2-Thiopentanone				
03.021	16	142-96-1	Dibutyl ether		205-575-3		

2. The table of part B is replaced by the following:

Flavouring substances notified in application of Article 3(2) of Regulation (EC) No 2232/96, for which the protection of the intellectual property rights of the manufacturer has been requested

Code	Date of receipt of the notification by the Commission	Comments
CN065	26.1.2001	
CN074	18.4.2003	6
CN075	18.4.2003	6
CN076	18.4.2003	6

COMMISSION DECISION

of 27 March 2006

amending Decision 1999/217/EC as regards the register of flavouring substances used in or on foodstuffs

(notified under document number C(2006) 899)

(Text with EEA relevance)

(2006/252/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs⁽¹⁾, and in particular Article 4(3) thereof,

Whereas:

- (1) Regulation (EC) No 2232/96 lays down the procedure for the establishment of rules in respect of flavouring substances used or intended to be used in foodstuffs. That Regulation provides for the adoption of a register of flavouring substances (the register) following notification by the Member States of a list of the flavouring substances which may be used in or on foodstuffs marketed in their territory and on the basis of scrutiny by the Commission of that notification. That register was adopted by Commission Decision 1999/217/EC⁽²⁾.
- (2) In addition, Regulation (EC) No 2232/96 provides for a programme for the evaluation of flavouring substances in order to check whether they comply with the general criteria for the use of flavouring substances set out in the Annex to that Regulation.
- (3) The Joint FAO/WHO Expert Committee on Food Additives (JECFA) concluded during its 65th meeting of 7 to 16 June 2005 that the acetamide (FL 16.047) is clearly carcinogenic in both mice and rats, and although the mechanism of tumour formation is

unknown, the possibility of a genotoxic mechanism can not be discounted. The JECFA considered it inappropriate for such a compound to be used as a flavouring agent. Accordingly acetamide does not comply with the general criteria set out in the Annex to Regulation (EC) No 2232/96 and should be deleted from the register.

- (4) Decision 1999/217/EC should therefore be amended accordingly.
- (5) The measures provided for in this Decision are in accordance with the opinion of the Standing Committee on the Food Chain and Animal Health,

HAS ADOPTED THIS DECISION:

Article 1

In Part A of the Annex to Decision 1999/217/EC, the row set out in the table for the substance attributed with FL-number 16.047 (acetamide) is deleted.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 27 March 2006.

For the Commission
Markos KYPRIANOU
Member of the Commission

⁽¹⁾ OJ L 299, 23.11.1996, p. 1. Regulation as amended by Regulation (EC) No 1882/2003 (OJ L 284, 31.10.2003, p. 1).

⁽²⁾ OJ L 84, 27.3.1999, p. 1. Decision as last amended by Decision 2005/389/EC (OJ L 128, 21.5.2005, p. 73).

COMMISSION DECISION

of 17 June 2008

amending Decision 1999/217/EC as regards the register of flavouring substances used in or on foodstuffs

(notified under document number C(2008) 2336)

(Text with EEA relevance)

(2008/478/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs⁽¹⁾, and in particular Article 4(3) thereof,

Whereas:

- (1) Regulation (EC) No 2232/96 lays down the procedure for the establishment of rules in respect of flavouring substances used or intended to be used in foodstuffs. That Regulation provides for the adoption of a register of flavouring substances (the register) following notification by the Member States of a list of the flavouring substances which may be used in or on foodstuffs marketed in their territory and on the basis of scrutiny by the Commission of that notification. That register was adopted by Commission Decision 1999/217/EC⁽²⁾.
- (2) In addition, Regulation (EC) No 2232/96 provides for a programme for the evaluation of flavouring substances in order to check whether they comply with the general criteria for the use of flavouring substances set out in the Annex to that Regulation.
- (3) The European Food Safety Authority concluded in its opinion of 29 November 2007 on aliphatic and aromatic hydrocarbons, that 2-Methylbuta-1,3-diene

(registered with FL-No 01 049) showed genotoxic potential *in vivo* and carcinogenic effect in experimental animals. Accordingly, its use as a flavouring substance is not acceptable, because it does not comply with the general criteria for the use of flavouring substances set out in the Annex to the Regulation (EC) No 2232/96. As a consequence, the substance should be deleted from the register.

- (4) Decision 1999/217/EC should be amended accordingly.
- (5) The measures provided for in this Decision are in accordance with the opinion of the Standing Committee on the Food Chain and Animal Health,

HAS ADOPTED THIS DECISION:

Article 1

In the Annex to Decision 1999/217/EC, in Part A, the row in the table for the substance bearing FL-No 01 049 (2-Methylbuta-1,3-diene) is deleted.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 17 June 2008.

For the Commission
Androulla VASSILIOU
Member of the Commission

⁽¹⁾ OJ L 299, 23.11.1996, p. 1. Regulation as amended by Regulation (EC) No 1882/2003 (OJ L 284, 31.10.2003, p. 1).

⁽²⁾ OJ L 84, 27.3.1999, p. 1. Decision as last amended by Decision 2006/252/EC (OJ L 91, 29.3.2006, p. 48).

REGULATION (EC) No 1334/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 16 December 2008

on flavourings and certain food ingredients with flavouring properties for use in and on foods and amending Council Regulation (EEC) No 1601/91, Regulations (EC) No 2232/96 and (EC) No 110/2008 and Directive 2000/13/EC

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 95 thereof,

Having regard to the proposal from the Commission,

Having regard to the Opinion of the European Economic and Social Committee ⁽¹⁾,

Acting in accordance with the procedure laid down in Article 251 of the Treaty ⁽²⁾,

Whereas:

- (1) Council Directive 88/388/EEC of 22 June 1988 on the approximation of the laws of the Member States relating to flavourings for use in foodstuffs and to source materials for their production ⁽³⁾ needs to be updated in the light of technical and scientific developments. In the interests of clarity and efficiency Directive 88/388/EEC should be replaced by this Regulation.
- (2) Council Decision 88/389/EEC of 22 June 1988 on the establishment, by the Commission, of an inventory of the source materials and substances used in the preparation of flavourings ⁽⁴⁾ provides for the establishment of that inventory within 24 months of its adoption. That Decision is now obsolete and should be repealed.
- (3) Commission Directive 91/71/EEC of 16 January 1991 completing Council Directive 88/388/EEC on the approximation of the laws of the Member States relating to flavourings for use in foodstuffs and to source materials for their production ⁽⁵⁾ lays down rules on the labelling of flavourings. Those rules are replaced by this Regulation and the Directive should now be repealed.

(4) The free movement of safe and wholesome food is an essential aspect of the internal market and contributes significantly to the health and well-being of citizens, and to their social and economic interests.

(5) In order to protect human health, this Regulation should cover flavourings, source materials for flavourings and foods containing flavourings. It should also cover certain food ingredients with flavouring properties which are added to food for the main purpose of adding flavour and which contribute significantly to the presence in food of certain naturally occurring undesirable substances (hereinafter referred to as food ingredients with flavouring properties), their source material and foods containing them.

(6) Raw foodstuffs which have not undergone any processing treatment and non-compound foodstuffs such as spices, herbs, teas and infusions (e.g. fruit or herbal tea) as well as mixtures of spices and/or herbs, mixtures of tea and mixtures for infusion, as long as they are consumed as such and/or not added to the food, do not fall within the scope of this Regulation.

(7) Flavourings are used to improve or modify the odour and/or taste of foods for the benefit of the consumer. Flavourings and food ingredients with flavouring properties should only be used if they fulfil the criteria laid down in this Regulation. They must be safe when used, and certain flavourings should, therefore, undergo a risk assessment before they can be permitted in food. Where possible, attention should be focused on whether or not the use of certain flavourings could have any negative consequences on vulnerable groups. The use of flavourings must not mislead the consumer and their presence in food should, therefore, always be indicated by appropriate labelling. Flavourings should, in particular, not be used in a way as to mislead the consumer about issues related to, amongst other things, the nature, freshness, quality of ingredients used, the naturalness of a product or of the production process, or the nutritional quality of the product. The approval of flavourings should also take into account other factors relevant to the matter under consideration including societal, economic, traditional, ethical and environmental factors, the precautionary principle and the feasibility of controls.

⁽¹⁾ OJ C 168, 20.7.2007, p. 34.

⁽²⁾ Opinion of the European Parliament of 10 July 2007 (OJ C 175 E, 10.7.2008, p. 176), Council Common Position of 10 March 2008 (OJ C 111 E, 6.5.2008, p. 46). Position of the European Parliament of 8 July 2008 (not yet published) and Council Decision of 18 November 2008.

⁽³⁾ OJ L 184, 15.7.1988, p. 61.

⁽⁴⁾ OJ L 184, 15.7.1988, p. 67.

⁽⁵⁾ OJ L 42, 15.2.1991, p. 25.

- (8) Since 1999, the Scientific Committee on Food and subsequently the European Food Safety Authority (hereinafter referred to as the Authority) established by Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety ⁽¹⁾ have expressed opinions on a number of substances occurring naturally in source materials for flavourings and food ingredients with flavouring properties which, according to the Committee of Experts on Flavouring Substances of the Council of Europe, raise toxicological concern. Substances for which the toxicological concern was confirmed by the Scientific Committee on Food should be regarded as undesirable substances which should not be added as such to food.
- (9) Due to their natural occurrence in plants, undesirable substances might be present in flavouring preparations and food ingredients with flavouring properties. The plants are used traditionally as food or food ingredients. Appropriate maximum levels should be established for the presence of these undesirable substances in foods which contribute most to the human intake of these substances, taking into account both the need to protect human health and their unavoidable presence in traditional foods.
- (10) Maximum levels for certain naturally occurring undesirable substances should focus on the food or food categories which contribute most to dietary intake. Should additional naturally occurring undesirable substances pose a risk to the health of the consumer, maximum levels should be set following the opinion of the Authority. Member States should organise controls on a risk basis in line with Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules ⁽²⁾. Food producers are obliged to take into account the presence of these substances when using food ingredients with flavouring properties and/or flavourings for preparation of all food to ensure that food which is not safe is not placed on the market.
- (11) Provisions should be established at Community level in order to prohibit, or restrict the use of, certain plant, animal, microbiological or mineral materials which raise concern for human health in the production of flavourings and food ingredients with flavouring properties and their applications in food production.
- (12) Risk assessments should be carried out by the Authority.
- (13) In order to ensure harmonisation, the risk assessment and approval of flavourings and source materials that need to undergo an evaluation should be carried out in accordance with the procedure laid down in Regulation (EC) No 1331/2008 of the European Parliament and of the Council of 16 December 2008 establishing a common authorisation procedure for food additives, food enzymes and food flavourings ⁽³⁾.
- (14) Flavouring substances are defined chemical substances, which include flavouring substances obtained by chemical synthesis or isolated using chemical processes, and natural flavouring substances. An evaluation programme of flavouring substances is ongoing in accordance with Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs ⁽⁴⁾. Under that Regulation a list of flavouring substances is to be adopted within five years of adoption of that programme. A new deadline should be set for the adoption of that list. That list will be proposed for inclusion in the list referred to in Article 2(1) of Regulation (EC) No 1331/2008.
- (15) Flavouring preparations are flavourings other than defined chemical substances obtained from materials of vegetable, animal or microbiological origin, by appropriate physical, enzymatic or microbiological processes, either in the raw state of the material or after processing for human consumption. Flavouring preparations produced from food do not need to undergo an evaluation or an approval procedure for use in and on foods unless there is doubt about their safety. However, the safety of flavouring preparations produced from non-food material should be evaluated and approved.
- (16) Regulation (EC) No 178/2002 defines food as any substance or product, whether processed, partially processed or unprocessed, intended to be, or reasonably expected to be, ingested by humans. Materials of vegetable, animal or microbiological origin, for which it can be sufficiently demonstrated that they have hitherto been used for the production of flavourings, are considered to be food materials for this purpose, even though some of these source materials, such as rose wood and strawberry leaves, may not have been used for food as such. They do not need to be evaluated.

⁽¹⁾ OJ L 31, 1.2.2002, p. 1.

⁽²⁾ OJ L 165, 30.4.2004, p. 1. Corrected version in OJ L 191, 28.5.2004, p. 1.

⁽³⁾ See page 1 of this Official Journal.

⁽⁴⁾ OJ L 299, 23.11.1996, p. 1.

- (17) Likewise, thermal process flavourings produced from food under specified conditions need not undergo an evaluation or an approval procedure for use in and on foods unless there is doubt about their safety. However, the safety of thermal process flavourings produced from non-food material or not complying with certain conditions of production should be evaluated and approved.
- (18) Regulation (EC) No 2065/2003 of the European Parliament and of the Council of 10 November 2003 on smoke flavourings used or intended for use in or on foods ⁽¹⁾ lays down a procedure for the safety assessment and approval of smoke flavourings and aims to establish a list of primary smoke condensates and primary tar fractions the use of which is authorised to the exclusion of all others.
- (19) Flavour precursors such as carbohydrates, oligo-peptides and amino acids impart flavour to food by chemical reactions which occur during food processing. Flavour precursors produced from food do not need to undergo an evaluation or an approval procedure for use in and on foods unless there is doubt about their safety. However, the safety of flavour precursors produced from non-food material should be evaluated and approved.
- (20) Other flavourings which do not fall under the definitions of the previously mentioned flavourings may be used in and on foods after they have undergone an evaluation and approval procedure. An example could be flavourings which are obtained by heating oil or fat to an extremely high temperature for a very short period of time, resulting in a grill-like flavour.
- (21) Material of vegetable, animal, microbiological or mineral origin other than food may only be authorised for the production of flavourings after its safety has been evaluated scientifically. It might be necessary to authorise the use of only certain parts of the material or to set conditions of use.
- (22) Flavourings can contain food additives as permitted by Regulation (EC) No 1333/2008 of the European Parliament and of the Council of 16 December 2008 on food additives ⁽²⁾ and/or other food ingredients for technological purposes such as for their storage, standardisation, dilution or dissolution and stabilisation.
- (23) A flavouring or a source material which falls within the scope of Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed ⁽³⁾ should be authorised in accordance with that Regulation as well as under this Regulation.
- (24) Flavourings remain subject to the general labelling obligations provided for in Directive 2000/13/EC of the European Parliament and of the Council of 20 March 2000 on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs ⁽⁴⁾ and, as the case may be, in Regulations (EC) No 1829/2003 and Regulation (EC) No 1830/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms ⁽⁵⁾. In addition, specific provisions on the labelling of flavourings sold as such to the manufacturer or to the final consumer should be contained in this Regulation.
- (25) Flavouring substances or flavouring preparations should only be labelled as 'natural' if they comply with certain criteria which ensure that consumers are not misled.
- (26) Specific information requirements should ensure that consumers are not misled concerning the source material used for the production of natural flavourings. In particular, if the term natural is used to describe a flavour, the flavouring components used should be entirely of natural origin. In addition, the source of the flavourings should be labelled, except when the source materials referred to would not be recognised in the flavour or taste of the food. If a source is mentioned, at least 95 % of the flavouring component should be obtained from the material referred to. As the use of flavourings should not mislead the consumer, the other maximum 5 % can only be used for standardisation or to give a, for example, more fresh, pungent, ripe or green note to the flavouring. When less than 95 % of the flavouring component derived from the source referred to has been used and the flavour of the source can still be recognised, the source should be revealed together with a statement that other natural flavourings have been added, for example cacao extract in which other natural flavourings have been added to impart a banana note.
- (27) Consumers should be informed if the smoky taste of a particular food is due to the addition of smoke flavourings. In accordance with Directive 2000/13/EC, the labelling should not confuse the consumer as to whether the product is smoked conventionally with fresh smoke or treated with smoke flavourings. Directive 2000/13/EC needs to be adapted to the definitions of flavourings, smoke flavourings and the term 'natural' for the description of flavourings laid down in this Regulation.

⁽¹⁾ OJ L 309, 26.11.2003, p. 1.

⁽²⁾ See page 16 of this Official Journal.

⁽³⁾ OJ L 268, 18.10.2003, p. 1.

⁽⁴⁾ OJ L 109, 6.5.2000, p. 29.

⁽⁵⁾ OJ L 268, 18.10.2003, p. 24.

- (28) For the evaluation of the safety of flavouring substances for human health, information on the consumption and use of flavouring substances is crucial. The amounts of flavouring substances added to food should therefore be checked on a regular basis.
- (29) The measures necessary for the implementation of this Regulation should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission ⁽¹⁾.
- (30) In particular the Commission should be empowered to amend the Annexes to this Regulation and to adopt appropriate transitional measures regarding the establishment of the Community list. Since those measures are of general scope and are designed to amend non-essential elements of this Regulation, *inter alia*, by supplementing it with new non-essential elements, they must be adopted in accordance with the regulatory procedure with scrutiny provided for in Article 5a of Decision 1999/468/EC.
- (31) When, on imperative grounds of urgency, the normal time-limits for the regulatory procedure with scrutiny cannot be complied with, the Commission should be able to apply the urgency procedure provided for in Article 5a(6) of Decision 1999/468/EC for the adoption of measures described in Article 8(2) and amendments to Annexes II to V to this Regulation.
- (32) Annexes II to V to this Regulation should be adapted as necessary to scientific and technical progress, taking into account the information provided by producers and users of flavourings and/or resulting from the monitoring and controls by the Member States.
- (33) In order to develop and update Community law on flavourings in a proportionate and effective way, it is necessary to collect data, share information and coordinate work between Member States. For that purpose, it may be useful to undertake studies to address specific issues with a view to facilitating the decision-making process. It is appropriate that the Community finance such studies as part of its budgetary procedure. The financing of such measures is covered by Regulation (EC) No 882/2004.
- (34) Pending the establishment of the Community list, provision should be made for the evaluation and approval of flavouring substances which are not covered by the evaluation programme provided for in Regulation (EC) No 2232/96. A transitional regime should therefore be laid down. Under that regime such flavouring substances should be evaluated and approved in accordance with the procedure laid down in Regulation (EC) No 1331/2008. However, the time periods provided for in that Regulation for the adoption by the Authority of its opinion and for the submission by the Commission to the Standing Committee on the Food Chain and Animal Health of a draft regulation updating the Community list should not apply, because priority should be given to the ongoing evaluation programme.
- (35) Since the objective of this Regulation, namely to lay down Community rules on the use of flavourings and certain food ingredients with flavouring properties in and on foods, cannot be sufficiently achieved by the Member States and can therefore, in the interests of market unity and a high level of consumer protection, be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve that objective.
- (36) Council Regulation (EEC) No 1601/91 of 10 June 1991 laying down general rules on the definition, description and presentation of aromatised wines, aromatised wine-based drinks and aromatised wine-product cocktails ⁽²⁾ and Regulation (EC) No 110/2008 of the European Parliament and of the Council of 15 January 2008 on the definition, description, presentation, labelling and the protection of geographical indications of spirit drinks ⁽³⁾ need to be adapted to certain new definitions laid down in this Regulation.
- (37) Regulations (EEC) No 1601/91, (EC) No 2232/96 and (EC) No 110/2008 and Directive 2000/13/EC should be amended accordingly,

HAVE ADOPTED THIS REGULATION:

CHAPTER I

SUBJECT MATTER, SCOPE AND DEFINITIONS

Article 1

Subject matter

This Regulation lays down rules on flavourings and food ingredients with flavouring properties for use in and on foods with a view to ensuring the effective functioning of the internal market whilst ensuring a high level of protection of human health and a high level of consumer protection, including the protection of consumer interests and fair practices in food trade, taking into account, where appropriate, the protection of the environment.

⁽¹⁾ OJ L 184, 17.7.1999, p. 23.

⁽²⁾ OJ L 149, 14.6.1991, p. 1.

⁽³⁾ OJ L 39, 13.2.2008, p. 16.

For those purposes, this Regulation provides for:

- (a) a Community list of flavourings and source materials approved for use in and on foods, set out in Annex I (hereinafter referred to as the 'Community list');
- (b) conditions of use of flavourings and food ingredients with flavouring properties in and on foods;
- (c) rules on the labelling of flavourings.

Article 2

Scope

1. This Regulation shall apply to:

- (a) flavourings which are used or intended to be used in or on foods, without prejudice to more specific provisions laid down in Regulation (EC) No 2065/2003;
- (b) food ingredients with flavouring properties;
- (c) food containing flavourings and/or food ingredients with flavouring properties;
- (d) source materials for flavourings and/or source materials for food ingredients with flavouring properties.

2. This Regulation shall not apply to:

- (a) substances which have exclusively a sweet, sour or salty taste;
- (b) raw foods;
- (c) non-compound foods and mixtures such as, but not exclusively, fresh, dried or frozen spices and/or herbs, mixtures of tea and mixtures for infusion as such as long as they have not been used as food ingredients.

Article 3

Definitions

1. For the purposes of this Regulation, the definitions laid down in Regulations (EC) No 178/2002 and (EC) No 1829/2003 shall apply.

2. For the purposes of this Regulation, the following definitions shall also apply:

- (a) 'flavourings' shall mean products:
 - (i) not intended to be consumed as such, which are added to food in order to impart or modify odour and/or taste;

- (ii) made or consisting of the following categories: flavouring substances, flavouring preparations, thermal process flavourings, smoke flavourings, flavour precursors or other flavourings or mixtures thereof;

- (b) 'flavouring substance' shall mean a defined chemical substance with flavouring properties;

- (c) 'natural flavouring substance' shall mean a flavouring substance obtained by appropriate physical, enzymatic or microbiological processes from material of vegetable, animal or microbiological origin either in the raw state or after processing for human consumption by one or more of the traditional food preparation processes listed in Annex II. Natural flavouring substances correspond to substances that are naturally present and have been identified in nature;

- (d) 'flavouring preparation' shall mean a product, other than a flavouring substance, obtained from:

- (i) food by appropriate physical, enzymatic or microbiological processes either in the raw state of the material or after processing for human consumption by one or more of the traditional food preparation processes listed in Annex II;

and/or

- (ii) material of vegetable, animal or microbiological origin, other than food, by appropriate physical, enzymatic or microbiological processes, the material being taken as such or prepared by one or more of the traditional food preparation processes listed in Annex II;

- (e) 'thermal process flavouring' shall mean a product obtained after heat treatment from a mixture of ingredients not necessarily having flavouring properties themselves, of which at least one contains nitrogen (amino) and another is a reducing sugar; the ingredients for the production of thermal process flavourings may be:

- (i) food;

and/or

- (ii) source material other than food;

- (f) 'smoke flavouring' shall mean a product obtained by fractionation and purification of a condensed smoke yielding primary smoke condensates, primary tar fractions and/or derived smoke flavourings as defined in points (1), (2) and (4) of Article 3 of Regulation (EC) No 2065/2003;

(g) 'flavour precursor' shall mean a product, not necessarily having flavouring properties itself, intentionally added to food for the sole purpose of producing flavour by breaking down or reacting with other components during food processing; it may be obtained from:

(i) food;

and/or

(ii) source material other than food;

(h) 'other flavouring' shall mean a flavouring added or intended to be added to food in order to impart odour and/or taste and which does not fall under definitions (b) to (g);

(i) 'food ingredient with flavouring properties' shall mean a food ingredient other than flavourings which may be added to food for the main purpose of adding flavour to it or modifying its flavour and which contributes significantly to the presence in food of certain naturally occurring undesirable substances;

(j) 'source material' shall mean material of vegetable, animal, microbiological or mineral origin from which flavourings or food ingredients with flavouring properties are produced; it may be:

(i) food;

or

(ii) source material other than food;

(k) 'appropriate physical process' shall mean a physical process which does not intentionally modify the chemical nature of the components of the flavouring, without prejudice to the listing of traditional food preparation processes in Annex II, and does not involve, *inter alia*, the use of singlet oxygen, ozone, inorganic catalysts, metal catalysts, organometallic reagents and/or UV radiation.

3. For the purpose of the definitions listed in paragraph 2(d), (e), (g) and (j), source materials for which hitherto there is significant evidence of use for the production of flavourings shall be considered as food for the purpose of this Regulation.

4. Flavourings may contain food additives as permitted by Regulation (EC) No 1333/2008 and/or other food ingredients incorporated for technological purposes.

CHAPTER II

CONDITIONS FOR USE OF FLAVOURINGS, FOOD INGREDIENTS WITH FLAVOURING PROPERTIES AND SOURCE MATERIALS

Article 4

General conditions for use of flavourings or food ingredients with flavouring properties

Only flavourings or food ingredients with flavouring properties which meet the following conditions may be used in or on foods:

(a) they do not, on the basis of the scientific evidence available, pose a safety risk to the health of the consumer; and

(b) their use does not mislead the consumer.

Article 5

Prohibition of non-compliant flavourings and/or non-compliant food

No person shall place on the market a flavouring or any food in which such a flavouring and/or food ingredients with flavouring properties are present if their use does not comply with this Regulation.

Article 6

Presence of certain substances

1. Substances listed in Part A of Annex III shall not be added as such to food.

2. Without prejudice to Regulation (EC) No 110/2008, maximum levels of certain substances, naturally present in flavourings and/or food ingredients with flavouring properties, in the compound foods listed in Part B of Annex III shall not be exceeded as a result of the use of flavourings and/or food ingredients with flavouring properties in and on those foods. The maximum levels of the substances set out in Annex III shall apply to foods as marketed, unless otherwise stated. By way of derogation from this principle, for dried and/or concentrated foods which need to be reconstituted, the maximum levels shall apply to the food as reconstituted according to the instructions on the label, taking into account the minimum dilution factor.

3. Detailed rules for the implementation of paragraph 2 may be adopted in accordance with the regulatory procedure referred to in Article 21(2), following the opinion of the European Food Safety Authority (hereinafter referred to as the 'Authority'), where necessary.

Article 7

Use of certain source materials

1. Source materials listed in Part A of Annex IV shall not be used for the production of flavourings and/or food ingredients with flavouring properties.
2. Flavourings and/or food ingredients with flavouring properties produced from source materials listed in Part B of Annex IV may be used only under the conditions indicated in that Annex.

Article 8

Flavourings and food ingredients with flavouring properties for which evaluation and approval are not required

1. The following flavourings and food ingredients with flavouring properties may be used in or on foods without an evaluation and approval under this Regulation, provided that they comply with Article 4:
 - (a) flavouring preparations referred to in Article 3(2)(d)(i);
 - (b) thermal process flavourings referred to in Article 3(2)(e)(i) which comply with the conditions for the production of thermal process flavourings and maximum levels for certain substances in thermal process flavourings set out in Annex V;
 - (c) flavour precursors referred to in Article 3(2)(g)(i);
 - (d) food ingredients with flavouring properties.

2. Notwithstanding paragraph 1, if the Commission, a Member State or the Authority expresses doubts concerning the safety of a flavouring or food ingredient with flavouring properties referred to in paragraph 1, a risk assessment of such flavouring or food ingredient with flavouring properties shall be carried out by the Authority. Articles 4, 5 and 6 of Regulation (EC) No 1331/2008 shall then apply *mutatis mutandis*. If necessary, the Commission shall adopt measures, following the opinion of the Authority, which are designed to amend non-essential elements of this Regulation, *inter alia*, by supplementing it, in accordance with the regulatory procedure with scrutiny referred to in Article 21(3). Such measures shall be laid down in Annexes III, IV and/or V where appropriate. On imperative grounds of urgency, the Commission may use the urgency procedure referred to in Article 21(4).

CHAPTER III

COMMUNITY LIST OF FLAVOURINGS AND SOURCE MATERIALS APPROVED FOR USE IN OR ON FOODS

Article 9

Flavourings and source materials for which an evaluation and approval is required

This Chapter shall apply to:

- (a) flavouring substances;
- (b) flavouring preparations referred to in Article 3(2)(d)(ii);
- (c) thermal process flavourings obtained by heating ingredients which fall partially or totally within Article 3(2)(e)(ii) and/or for which the conditions for the production of thermal process flavourings and/or the maximum levels for certain undesirable substances set out in Annex V are not met;
- (d) flavour precursors referred to in Article 3(2)(g)(ii);
- (e) other flavourings referred to in Article 3(2)(h);
- (f) source materials other than food referred to in Article 3(2)(j)(ii).

Article 10

Community list of flavourings and source materials

Of the flavourings and source materials referred to in Article 9, only those included in the Community list may be placed on the market as such and used in or on foods under the conditions of use specified therein, where applicable.

Article 11

Inclusion of flavourings and source materials in the Community list

1. A flavouring or source material may be included in the Community list, in accordance with the procedure laid down by Regulation (EC) No 1331/2008, only if it complies with the conditions set out in Article 4 of this Regulation.
2. The entry for a flavouring or source material in the Community list shall specify:
 - (a) the identification of the flavouring or the source material approved;
 - (b) where necessary, the conditions under which the flavouring may be used.

3. The Community list shall be amended in accordance with the procedure referred to in Regulation (EC) No 1331/2008.

Article 12

Flavourings or source materials falling within the scope of Regulation (EC) No 1829/2003

1. A flavouring or source material falling within the scope of Regulation (EC) No 1829/2003 may be included in the Community list in Annex I in accordance with this Regulation only when it is covered by an authorisation in accordance with Regulation (EC) No 1829/2003.

2. When a flavouring already included in the Community list is produced from a different source falling within the scope of Regulation (EC) No 1829/2003, it will not require a new authorisation under this Regulation, as long as the new source is covered by an authorisation in accordance with Regulation (EC) No 1829/2003 and the flavouring complies with the specifications established under this Regulation.

Article 13

Interpretation decisions

Where necessary, it may be decided in accordance with the regulatory procedure referred to in Article 21(2):

- (a) whether or not a given substance or mixture of substances, material or type of food falls within the categories listed in Article 2(1);
- (b) to which specific category, defined in Article 3(2)(b) to (j), a given substance belongs;
- (c) whether or not a particular product belongs to a food category or is a food referred to in Annex I or Annex III, Part B.

CHAPTER IV

LABELLING

Article 14

Labelling of flavourings not intended for sale to the final consumer

1. Flavourings not intended for sale to the final consumer may only be marketed with the labelling provided for in Articles 15 and 16, which must be easily visible, clearly legible and indelible. The information provided for in Article 15 shall be in a language easily understandable to purchasers.

2. Within its own territory, the Member State in which the product is marketed may, in accordance with the Treaty, stipulate that the information provided for in Article 15 shall be given in one or more of the official languages of the Community, to be determined by that Member State. This shall not preclude such information from being indicated in several languages.

Article 15

General labelling requirements for flavourings not intended for sale to the final consumer

1. Where flavourings not intended for sale to the final consumer are sold singly or mixed with each other and/or with other food ingredients and/or with other substances added to them in accordance with Article 3(4), their packaging or containers shall bear the following information:

- (a) the sales description: either the word 'flavouring' or a more specific name or description of the flavouring;
- (b) the statement either 'for food' or the statement 'restricted use in food' or a more specific reference to its intended food use;
- (c) if necessary, the special conditions for storage and/or use;
- (d) a mark identifying the batch or lot;
- (e) in descending order of weight, a list of:
 - (i) the categories of flavourings present and
 - (ii) the names of each of the other substances or materials in the product or, where appropriate, their E-number;
- (f) the name or business name and address of the manufacturer, packager or seller;
- (g) an indication of the maximum quantity of each component or group of components subject to quantitative limitation in food and/or appropriate information in clear and easily understandable terms enabling the purchaser to comply with this Regulation or other relevant Community law;
- (h) the net quantity;
- (i) a date of minimum durability or use-by-date;
- (j) where relevant, information on a flavouring or other substances referred to in this Article and listed in Annex IIIa to Directive 2000/13/EC as regards the indication of the ingredients present in foodstuffs.

2. By way of derogation from paragraph 1, the information required in points (e) and (g) of that paragraph may appear merely on the documents relating to the consignment which are to be supplied with or prior to the delivery, provided that the indication 'not for retail sale' appears on an easily visible part of the packaging or container of the product in question.

3. By way of derogation from paragraph 1, where flavourings are supplied in tankers, all of the information may appear merely on the accompanying documents relating to the consignment which are to be supplied with the delivery.

*Article 16***Specific requirements for use of the term 'natural'**

1. If the term 'natural' is used to describe a flavouring in the sales description referred to in Article 15(1)(a) the provisions of paragraphs 2 to 6 of this Article shall apply.
2. The term 'natural' for the description of a flavouring may only be used if the flavouring component comprises only flavouring preparations and/or natural flavouring substances.
3. The term 'natural flavouring substance(s)' may only be used for flavourings in which the flavouring component contains exclusively natural flavouring substances.
4. The term 'natural' may only be used in combination with a reference to a food, food category or a vegetable or animal flavouring source if the flavouring component has been obtained exclusively or by at least 95 % by w/w from the source material referred to.

The description shall read 'natural "food(s) or food category or source(s)" flavouring'.

5. The term 'natural "food(s) or food category or source(s)" flavouring with other natural flavourings' may only be used if the flavouring component is partially derived from the source material referred to, the flavour of which can easily be recognised.
6. The term 'natural flavouring' may only be used if the flavouring component is derived from different source materials and where a reference to the source materials would not reflect their flavour or taste.

*Article 17***Labelling of flavourings intended for sale to the final consumer**

1. Without prejudice to Directive 2000/13/EC, Council Directive 89/396/EEC of 14 June 1989 on indications or marks identifying the lot to which a foodstuff belongs ⁽¹⁾ and Regulation (EC) No 1829/2003, flavourings sold singly or mixed with each other and/or with other food ingredients and/or to which other substances are added and which are intended for sale to the final consumer may be marketed only if their packaging contains the statement either 'for food' or 'restricted use in food' or a more specific reference to their intended food use, which must be easily visible, clearly legible and indelible.
2. If the term 'natural' is used to describe a flavouring in the sales description referred to in Article 15(1)(a), Article 16 shall apply.

⁽¹⁾ OJ L 186, 30.6.1989, p. 21.

*Article 18***Other labelling requirements**

Articles 14 to 17 shall be without prejudice to more detailed or more extensive laws, regulations or administrative provisions regarding weights and measures or applying to the presentation, classification, packaging and labelling of dangerous substances and preparations or applying to the transport of such substances and preparations.

CHAPTER V

PROCEDURAL PROVISIONS AND IMPLEMENTATION*Article 19***Reporting by the food business operators**

1. A producer or user of a flavouring substance, or the representative of such producer or user, shall, at the request of the Commission, inform it of the amount of the substance added to foods in the Community in a period of 12 months. The information provided in this context shall be treated as confidential insofar as this information is not required for the safety assessment.

Information on the use levels for specific food categories in the Community shall be made available to Member States by the Commission.

2. Where applicable, for a flavouring already approved under this Regulation which is prepared by production methods or starting materials significantly different from those included in the risk assessment of the Authority, a producer or user shall, before marketing the flavouring, submit to the Commission the necessary data to allow an evaluation of the flavouring to be undertaken by the Authority with regard to the modified production method or characteristics.

3. A producer or user of flavourings and/or source materials shall inform the Commission immediately of any new scientific or technical information which is known and accessible to him and which might affect the assessment of the safety of the flavouring substance.

4. Detailed rules for the implementation of paragraph 1 shall be adopted in accordance with the regulatory procedure referred to in Article 21(2).

*Article 20***Monitoring and reporting by the Member States**

1. Member States shall establish systems to monitor the consumption and use of flavourings set out in the Community list and the consumption of the substances listed in Annex III on a risk-based approach, and shall report their findings with appropriate frequency to the Commission and to the Authority.

2. After the Authority has been consulted, a common methodology for the gathering by Member States of information on the consumption and use of flavourings set out in the Community list and of the substances listed in Annex III shall be adopted in accordance with the regulatory procedure referred to in Article 21(2) by 20 January 2011.

Article 21

Committee

1. The Commission shall be assisted by the Standing Committee on the Food Chain and Animal Health.

2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

3. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

4. Where reference is made to this paragraph, Article 5a(1), (2), (4) and (6) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

Article 22

Amendments to Annexes II to V

Amendments to Annexes II to V to this Regulation to reflect scientific and technical progress which are designed to amend non-essential elements of this Regulation shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 21(3), following the opinion of the Authority, where necessary.

On imperative grounds of urgency, the Commission may use the urgency procedure referred to in Article 21(4).

Article 23

Community financing of harmonised policies

The legal basis for the financing of measures resulting from this Regulation shall be Article 66(1)(c) of Regulation (EC) No 882/2004.

CHAPTER VI

TRANSITIONAL AND FINAL PROVISIONS

Article 24

Repeals

1. Directive 88/388/EEC, Decision 88/389/EEC and Directive 91/71/EEC shall be repealed from 20 January 2011.

2. Regulation (EC) No 2232/96 shall be repealed from the date of application of the list referred to in Article 2(2) of that Regulation.

3. References to the repealed acts shall be construed as references to this Regulation.

Article 25

Introduction of the list of flavouring substances into the Community list of flavourings and source materials and transitional regime

1. The Community list shall be established by introducing the list of flavouring substances referred to in Article 2(2) of Regulation (EC) No 2232/96 into Annex I to this Regulation at the time of its adoption.

2. Pending the establishment of the Community list, Regulation (EC) No 1331/2008 shall apply for the evaluation and approval of flavouring substances which are not covered by the evaluation programme provided for in Article 4 of Regulation (EC) No 2232/96.

By way of derogation from that procedure, the period of nine months referred to in Article 5(1) and Article 7 of Regulation (EC) No 1331/2008 shall not apply to such evaluation and approval.

3. Any appropriate transitional measures which are designed to amend non-essential elements of this Regulation, *inter alia*, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 21(3).

Article 26

Amendments to Regulation (EEC) No 1601/91

Article 2(1) is hereby amended as follows:

1. in point (a), the first sub-indent of the third indent shall be replaced by the following:

‘— flavouring substances and/or flavouring preparations as defined in Article 3(2)(b) and (d) of Regulation (EC) No 1334/2008 of the European Parliament and of the Council of 16 December 2008 on flavourings and certain food ingredients with flavouring properties for use in and on foods (*), and/or

(*) OJ L 354, 31.12.2008, p. 34.’

2. in point (b), the first sub-indent of the second indent shall be replaced by the following:

‘— flavouring substances and/or flavouring preparations as defined in Article 3(2)(b) and (d) of Regulation (EC) No 1334/2008, and/or’;

3. in point (c), the first sub-indent of the second indent shall be replaced by the following:

‘— flavouring substances and/or flavouring preparations as defined in Article 3(2)(b) and (d) of Regulation (EC) No 1334/2008, and/or’.

Article 27

Amendment to Regulation (EC) No 2232/96

Article 5(1) of Regulation (EC) No 2232/96 shall be replaced by the following:

- ‘1. The list of flavouring substances referred to in Article 2(2) shall be adopted in accordance with the procedure referred to in Article 7 by 31 December 2010 at the latest.’

Article 28

Amendments to Regulation (EC) No 110/2008

Regulation (EC) No 110/2008 is hereby amended as follows:

1. in Article 5(2), point (c) shall be replaced by the following:

‘(c) contain flavouring substances as defined in Article 3(2)(b) of Regulation (EC) No 1334/2008 of the European Parliament and of the Council of 16 December 2008 on flavourings and certain food ingredients with flavouring properties for use in and on foods (*) and flavouring preparations as defined in Article 3(2)(d) of that Regulation;

(*) OJ L 354, 31.12.2008, p. 34.’

2. in Article 5(3), point (c) shall be replaced by the following:

‘(c) contain one or more flavourings as defined in Article 3(2)(a) of Regulation (EC) No 1334/2008;’

3. in Annex I, point (9) shall be replaced by the following:

‘(9) *Flavouring*

Flavouring means using in the preparation of a spirit drink one or more of the flavourings defined in Article 3(2)(a) of Regulation (EC) No 1334/2008.’

4. Annex II shall be amended as follows:

- (a) paragraph 19(c) shall be replaced by the following:

‘(c) Other flavouring substances as defined in Article 3(2)(b) of Regulation (EC) No 1334/2008 and/or flavouring preparations as defined in Article 3(2)(d) of that Regulation, and/or aromatic plants or parts of aromatic plants may be used in addition, but the organoleptic characteristics of juniper must be discernible, even if they are sometimes attenuated.’

- (b) paragraph 20(c) shall be replaced by the following:

‘(c) Only flavouring substances as defined in Article 3(2)(b) of Regulation (EC) No 1334/2008 and/or flavouring preparations as defined in

Article 3(2)(d) of that Regulation shall be used for the production of gin so that the taste is predominantly that of juniper.’;

- (c) paragraph 21(a) (ii) shall be replaced by the following:

‘(ii) the mixture of the product of such distillation and ethyl alcohol of agricultural origin with the same composition, purity and alcoholic strength; flavouring substances and/or flavouring preparations as specified in category 20(c) may also be used to flavour distilled gin.’;

- (d) paragraph 23(c) shall be replaced by the following:

‘(c) Other flavouring substances as defined in Article 3(2)(b) of Regulation (EC) No 1334/2008 and/or flavouring preparations as defined in Article 3(2)(d) of that Regulation may additionally be used but there must be a predominant taste of caraway.’;

- (e) paragraph 24(c) shall be replaced by the following:

‘(c) Other natural flavouring substances as defined in Article 3(2)(c) of Regulation (EC) No 1334/2008 and/or flavouring preparations as defined in Article 3(2)(d) of that Regulation may additionally be used, but the flavour of these drinks is largely attributable to distillates of caraway (*Carum carvi* L.) and/or dill (*Anethum graveolens* L.) seeds, the use of essential oils being prohibited.’;

- (f) paragraph 30(a) shall be replaced by the following:

‘(a) Bitter-tasting spirit drinks or bitter are spirit drinks with a predominantly bitter taste produced by flavouring ethyl alcohol of agricultural origin with flavouring substances as defined in Article 3(2)(b) of Regulation (EC) No 1334/2008 and/or flavouring preparations as defined in Article 3(2)(d) of that Regulation.’;

- (g) in paragraph 32(c), the first subparagraph and the introductory part of the second subparagraph shall be replaced by the following:

‘(c) Flavouring substances as defined in Article 3(2)(b) of Regulation (EC) No 1334/2008 and flavouring preparations as defined in Article 3(2)(d) of that Regulation may be used in the preparation of liqueur. However, only natural flavouring substances as defined in Article 3(2)(c) of Regulation (EC) No 1334/2008 and flavouring preparations as defined in Article 3(2)(d) of that Regulation shall be used in the preparation of the following liqueurs.’;

(h) paragraph 41(c) shall be replaced by the following:

‘(c) Only flavouring substances as defined in Article 3(2)(b) of Regulation (EC) No 1334/2008 and flavouring preparations as defined in Article 3(2)(d) of that Regulation may be used in the preparation of egg liqueur or advocaat or avocát or advokát.’;

(i) paragraph 44(a) shall be replaced by the following:

‘(a) Vákevá glögi or spritglögg is a spirit drink produced by flavouring ethyl alcohol of agricultural origin with flavour of cloves and/or cinnamon using one of the following processes: maceration and/or distillation, redistillation of the alcohol in the presence of parts of the plants specified above, addition of natural flavouring substances as defined in Article 3(2)(c) of Regulation (EC) No 1334/2008 of cloves or cinnamon or a combination of these methods.’;

(j) paragraph 44(c) shall be replaced by the following:

‘(c) Other flavourings, flavouring substances and/or flavouring preparations as defined in Article 3(2)(b), (d) and (h) of Regulation (EC) No 1334/2008 may also be used, but the flavour of the specified spices must be predominant.’;

(k) In point (c) of paragraphs 25, 26, 27, 28, 29, 33, 34, 35, 36, 37, 38, 39, 40, 42, 43, 45 and 46, the word ‘preparations’ shall be replaced by ‘flavouring preparations’.

Article 29

Amendment to Directive 2000/13/EC

In Directive 2000/13/EC, Annex III shall be replaced by the following:

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Strasbourg, 16 December 2008.

For the European Parliament
The President
H.-G. PÖTTERING

For the Council
The President
B. LE MAIRE

‘ANNEX III

DESIGNATION OF FLAVOURINGS IN THE LIST OF INGREDIENTS

1. Without prejudice to paragraph 2, flavourings shall be designated by the terms
 - “flavourings” or a more specific name or description of the flavouring, if the flavouring component contains flavourings as defined in Article 3(2)(b), (c), (d), (e), (f), (g) and (h) of Regulation (EC) No 1334/2008 of the European Parliament and of the Council of 16 December 2008 on flavourings and certain food ingredients with flavouring properties for use in and on foods (*);
 - “smoke flavouring(s)”, or “smoke flavouring(s) produced from “food(s) or food category or source(s)”” (e.g. smoke flavouring produced from beech), if the flavouring component contains flavourings as defined in Article 3(2)(f) of Regulation (EC) No 1334/2008 and imparts a smoky flavour to the food.
2. The term “natural” for the description of flavourings shall be used in accordance with Article 16 of Regulation (EC) No 1334/2008.

(*) OJ L 354, 31.12.2008, p. 34.’

Article 30

Entry into force

This Regulation shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

It shall apply from 20 January 2011.

Article 10 shall apply from 18 months after the date of application of the Community list.

Articles 26 and 28 shall apply from the date of application of the Community list.

Article 22 shall apply from 20 January 2009. Foods lawfully placed on the market or labelled prior to 20 January 2011 which do not comply with this Regulation may be marketed until their date of minimum durability or use-by-date.

ANNEX I

Community list of flavourings and source materials approved for use in and on foods

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ANNEX II

List of traditional food preparation processes

Chopping	Coating
Heating, cooking, baking, frying (up to 240 °C at atmospheric pressure) and pressure cooking (up to 120 °C)	Cooling
Cutting	Distillation/rectification
Drying	Emulsification
Evaporation	Extraction, incl. solvent extraction in accordance with Directive 88/344/EEC
Fermentation	Filtration
Grinding	
Infusion	Maceration
Microbiological processes	Mixing
Peeling	Percolation
Pressing	Refrigeration/Freezing
Roasting/Grilling	Squeezing
Steeping	

ANNEX III

Presence of certain substances

Part A: *Substances which shall not be added as such to food*

Agaric acid
 Aloin
 Capsaicin
 1,2-Benzopyrone, coumarin
 Hypericine
 Beta-asarone
 1-Allyl-4-methoxybenzene, estragole
 Hydrocyanic acid
 Menthofuran
 4-Allyl-1,2-dimethoxybenzene, methyleugenol
 Pulegone
 Quassin
 1-Allyl-3,4-methylene dioxy benzene, safrole
 Teucrin A
 Thujone (alpha and beta)

Part B: *Maximum levels of certain substances, naturally present in flavourings and food ingredients with flavouring properties, in certain compound food as consumed to which flavourings and/or food ingredients with flavouring properties have been added*

Name of the substance	Compound food in which the presence of the substance is restricted	Maximum level mg/kg
Beta-asarone	Alcoholic beverages	1,0
1-Allyl-4-methoxybenzene, Estragol (*)	Dairy products	50
	Processed fruits, vegetables (incl. mushrooms, fungi, roots, tubers, pulses and legumes), nuts and seeds	50
	Fish products	50
	Non-alcoholic beverages	10
Hydrocyanic acid	Nougat, marzipan or its substitutes or similar products	50
	Canned stone fruits	5
	Alcoholic beverages	35
Menthofuran	Mint/peppermint containing confectionery, except micro breath freshening confectionery	500
	Micro breath freshening confectionery	3 000
	Chewing gum	1 000
	Mint/peppermint containing alcoholic beverages	200
4-Allyl-1,2-dimethoxy-benzene, Methyleugenol (*)	Dairy products	20
	Meat preparations and meat products, including poultry and game	15
	Fish preparations and fish products	10
	Soups and sauces	60
	Ready-to-eat savouries	20
	Non-alcoholic beverages	1

Name of the substance	Compound food in which the presence of the substance is restricted	Maximum level mg/kg
Pulegone	Mint/peppermint containing confectionery, except micro breath freshening confectionery	250
	Micro breath freshening confectionery	2 000
	Chewing gum	350
	Mint/peppermint containing non-alcoholic beverages	20
	Mint/peppermint containing alcoholic beverages	100
Quassin	Non-alcoholic beverages	0,5
	Bakery wares	1
	Alcoholic beverages	1,5
1-Allyl-3,4-methylene dioxy benzene, safrole (*)	Meat preparations and meat products, including poultry and game	15
	Fish preparations and fish products	15
	Soups and sauces	25
	Non-alcoholic beverages	1
Teucrin A	Bitter-tasting spirit drinks or bitter (1)	5
	Liqueurs (2) with a bitter taste	5
	Other alcoholic beverages	2
Thujone (alpha and beta)	Alcoholic beverages, except those produced from Artemisia species	10
	Alcoholic beverages produced from Artemisia species	35
	Non-alcoholic beverages produced from Artemisia species	0,5
Coumarin	Traditional and/or seasonal bakery ware containing a reference to cinnamon in the labelling	50
	Breakfast cereals including muesli	20
	Fine bakery ware, with the exception of traditional and/or seasonal bakery ware containing a reference to cinnamon in the labelling	15
	Desserts	5

(*) The maximum levels shall not apply where a compound food contains no added flavourings and the only food ingredients with flavouring properties which have been added are fresh, dried or frozen herbs and spices. After consultation with the Member States and the Authority, based on data made available by the Member States and on the newest scientific information, and taking into account the use of herbs and spices and natural flavouring preparations, the Commission, if appropriate, proposes amendments to this derogation.

(1) As defined in Annex II, paragraph 30 of Regulation (EC) No 110/2008.

(2) As defined in Annex II, paragraph 32 of Regulation (EC) No 110/2008.

ANNEX IV

List of source materials to which restrictions apply for their use in the production of flavourings and food ingredients with flavouring properties

Part A: *Source materials which shall not be used for the production of flavourings and food ingredients with flavouring properties*

Source material	
Latin name	Common name
Tetraploid form of <i>Acorus calamus</i> L.	Tetraploid form of Calamus

Part B: *Conditions of use for flavourings and food ingredients with flavouring properties produced from certain source materials*

Source material		Conditions of use
Latin name	Common name	
<i>Quassia amara</i> L. and <i>Picrasma excelsa</i> (Sw)	Quassia	Flavourings and food ingredients with flavouring properties produced from the source material may only be used for the production of beverages and bakery wares
<i>Laricifomes officinales</i> (Vill.: Fr) Kotl. et Pouz or <i>Fomes officinalis</i>	White agaric mushroom	Flavourings and food ingredients with flavouring properties produced from the source material may only be used for the production of alcoholic beverages
<i>Hypericum perforatum</i> L.	St John's wort	
<i>Teucrium chamaedrys</i> L.	Wall germander	

ANNEX V

Conditions for the production of thermal process flavourings and maximum levels for certain substances in thermal process flavouringsPart A: *Conditions for the production*

- (a) The temperature of the products during processing shall not exceed 180 °C.
- (b) The duration of the thermal processing shall not exceed 15 minutes at 180 °C with correspondingly longer times at lower temperatures, i.e. a doubling of the heating time for each decrease of temperature by 10 °C, up to a maximum of 12 hours.
- (c) The pH during processing should not exceed the value of 8,0.

Part B: *Maximum levels for certain substances*

Substance	Maximum levels µg/kg
2-amino-3,4,8-trimethylimidazo [4,5-f] quinoxaline (4,8-DiMeIQx)	50
2-amino-1-methyl-6-phenylimidazol [4,5-b]pyridine (PhIP)	50

COMMISSION DECISION

of 26 February 2009

amending Decision 1999/217/EC as regards the register of flavouring substances used in or on foodstuffs

(notified under document number C(2009) 1222)

(Text with EEA relevance)

(2009/163/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs⁽¹⁾, and in particular Article 3(2) thereof,

Whereas:

(1) Regulation (EC) No 2232/96 lays down the procedure for the establishment of rules in respect of flavouring substances used or intended to be used in foodstuffs. That Regulation provides for the adoption of a register of flavouring substances (the register) following notification by the Member States of a list of the flavouring substances which may be used in or in on foodstuffs marketed in their territory and on the basis of scrutiny by the Commission of that notification.

(2) In addition, Regulation (EC) No 2232/96 provides for a programme of evaluation of the flavouring substances contained in the register (the evaluation programme) in order to check if those substances comply within the general criteria for their use set out in the Annex to that Regulation. Regulation (EC) No 2232/96 provides that the persons responsible for placing the flavouring substances on the market are to forward data necessary for their evaluation to the Commission. That Regulation also provides that following completion of the evaluation programme, the list of flavouring substances the use of which is to be authorised to the exclusion of others, is to be adopted.

(3) By Decision 1999/217/EC⁽²⁾ the Commission adopted, pursuant to Regulation (EC) No 2232/96, a register of flavouring substances used in or on foodstuffs.

(4) Commission Regulation (EC) No 1565/2000 of 18 July 2000 laying down the measures necessary for the adoption of an evaluation programme in application of Regulation (EC) No 2232/96 of the European Parliament and of the Council⁽³⁾, provides for certain information to be submitted by the person responsible for placing certain flavouring substances contained in the register on the market in order to enable the evaluation of the substance to be carried out.

(5) For 148 substances no information has been submitted nor has the Commission been informed about any intention to still submit information. Therefore, those substances cannot be evaluated in respect of their compliance with the general criteria for the use of flavouring substances set out in Regulation (EC) No 2232/96. Accordingly, it is appropriate to delete those substances from the register.

(6) In application of Regulation (EC) No 2232/96 and Commission Recommendation 98/282/EC of 21 April 1998 on the ways in which the Member States and the signatory States to the Agreement on the European Economic Area should protect intellectual property in connection with the development and manufacture of flavouring substances referred to in Regulation (EC) No 2232/96 of the European Parliament and of the Council⁽⁴⁾, for a number of substances, the notifying Member States requested that they should be registered in such a way as to protect the intellectual property rights of the manufacturer.

(7) Protection for those substances, listed in Part B of the register, is limited to a maximum period of five years following the date of receipt of the notification. That period has now expired for the four remaining substances which should consequently be transferred to Part A of the register.

(8) Decision 1999/217/EC should therefore be amended accordingly.

(9) The measures provided for in this Decision are in accordance with the opinion of the Standing Committee on the Food Chain and Animal Health,

⁽¹⁾ OJ L 299, 23.11.1996, p. 1.

⁽²⁾ OJ L 84, 27.3.1999, p. 1.

⁽³⁾ OJ L 180, 19.7.2000, p. 8.

⁽⁴⁾ OJ L 127, 29.4.1998, p. 32.

HAS ADOPTED THIS DECISION:

Article 1

The Annex to Decision 1999/217/EC is amended in accordance with the Annex to this Decision.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 26 February 2009.

For the Commission
Androulla VASSILIOU
Member of the Commission

ANNEX

1. The first paragraph of the Annex to Decision 1999/217/EC, which reads as follows, should be deleted:

'The register of chemically defined flavouring substances has been divided into two distinct parts. Part A lists the substances according to their FL numbers. Part B lists those substances for which confidentiality has been requested by a Member State in order to protect the intellectual property rights of the manufacturer.'

2. Part A of the Annex to Decision 1999/217/EC is amended as follows:

- (a) The rows set out in the table for the substances attributed with the following FL numbers are deleted:

01.025	01.062	01.068	01.069	01.071	01.072	01.073	01.074
01.075	01.076	02.053	02.068	02.118	02.129	02.130	02.151
02.163	02.199	02.215	02.232	02.237	02.238	02.244	03.018
03.021	04.060	04.071	04.081	04.083	05.054	05.133	05.135
05.176	05.177	05.200	05.207	05.209	05.210	05.212	05.213
05.214	05.215	06.060	06.068	06.099	06.108	06.113	07.143
07.144	07.145	07.163	07.173	07.174	07.192	07.216	07.241
07.245	07.246	07.252	08.110	08.111	08.126	08.128	09.311
09.384	09.576	09.635	09.654	09.817	09.845	09.853	09.881
09.887	09.896	09.903	09.914	10.041	10.046	10.065	10.071
11.011	11.012	11.013	11.019	11.022	11.024	12.110	12.115
12.186	12.245	12.246	12.247	12.248	12.250	12.260	12.261
12.263	13.036	13.104	13.110	13.121	13.131	13.147	13.156
13.158	13.159	13.164	13.181	13.187	14.090	14.151	14.153
14.156	14.157	14.158	14.162	14.165	14.166	15.041	15.046
15.053	15.059	15.065	15.073	15.075	15.095	15.100	15.101
15.104	15.105	15.117	15.121	15.122	15.123	15.124	16.050
16.064	16.065	16.066	16.067	16.068	16.069	16.070	16.078
16.079	16.084	16.085	17.009				

- (b) The following rows are inserted in the table:

FL No	Chemical group	CAS	Name	Fema	CoE	Einecs	FL No	Synonyms	Systematic name	Comments
'09.929	8	220621-22-7	L-Monomenthyl glutarate	4006			09.929			
03.023	16	1608-72-6	1-Ethoxyethyl-acetate	4069			03.023			
16.083	30	446-71-9	2-(4-Hydroxy-3-methoxyphenyl)-5,7-dihydroxy chromanone				16.083			
07.250	5	3916-64-1	3,5-Heptadien-2-one				'07.250'			

3. Part B of the Annex to Decision 1999/217/EC is deleted.

II

(Non-legislative acts)

REGULATIONS

COMMISSION IMPLEMENTING REGULATION (EU) No 872/2012

of 1 October 2012

adopting the list of flavouring substances provided for by Regulation (EC) No 2232/96 of the European Parliament and of the Council, introducing it in Annex I to Regulation (EC) No 1334/2008 of the European Parliament and of the Council and repealing Commission Regulation (EC) No 1565/2000 and Commission Decision 1999/217/EC

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

substances notified by the Member States and on the basis of a specific evaluation programme.

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996 laying down a Community procedure for flavouring substances used or intended for use in or on foodstuffs⁽¹⁾, and in particular Articles 3(2) and 4(1) and Article 5 thereof,

- (3) The notified substances were entered in a register laid down by Commission Decision 1999/217/EC of 23 February 1999 adopting a register of flavouring substances used in or on foodstuffs drawn up in application of Regulation (EC) No 2232/96 of the European Parliament and of the Council⁽²⁾.

Having regard to Regulation (EC) No 1334/2008 of the European Parliament and of the Council of 16 December 2008 on flavourings and certain food ingredients with flavouring properties for use in and on foods and amending Council Regulation (EEC) No 1601/91, Regulations (EC) No 2232/96 and (EC) No 110/2008 and Directive 2000/13/EC⁽²⁾, and in particular Article 25(1) thereof,

- (4) Commission Regulation (EC) No 1565/2000⁽⁴⁾ has laid down the measures necessary for the adoption of an evaluation programme in application of Regulation (EC) No 2232/96. Pursuant to Article 5(2) of Regulation (EC) No 2232/96, flavouring substances not included in the register have also been included in the evaluation programme.

Whereas:

- (1) Regulation (EC) No 2232/96 provides for a Community procedure for evaluation and authorisation of flavouring substances. The Member States notified to the Commission the list of flavouring substances which may be used in or on foods marketed on their territory.
- (2) Regulation (EC) No 2232/96 provides for a list of flavouring substances that are authorised to the exclusion of all others. That list is to be established on the basis of a register containing the flavouring

- (5) The European Food Safety Authority (hereinafter referred to as 'the Authority') evaluated a number of flavouring substances⁽⁵⁾ through a stepwise approach that integrates information on structure-activity relationships, intake from current uses, toxicological threshold of concern, and available data on metabolism and toxicity. Those flavouring substances which do not give rise to safety concerns at their levels of dietary intakes should be included in the list referred to in Regulation (EC) No 2232/96.

⁽¹⁾ OJ L 299, 23.11.1996, p. 1.

⁽²⁾ OJ L 354, 31.12.2008, p. 34.

⁽³⁾ OJ L 84, 27.3.1999, p. 1.

⁽⁴⁾ OJ L 180, 19.7.2000, p. 8.

⁽⁵⁾ <http://www.efsa.europa.eu/>

- (6) Pursuant to Article 2(1) of Regulation (EC) No 1565/2000, substances that are contained in the register and have already been classified by the Scientific Committee on Food (hereinafter referred to as 'SCF') in Category 1 ⁽⁶⁾ or by the Council of Europe in Category A ⁽⁷⁾ or by Joint FAO/WHO Expert Committee on Food Additives (hereinafter referred to as 'JECFA'), so as to present no safety concern, as laid down in the reports of its 46th, 49th, 51st and 53rd meeting ⁽⁸⁾, need not be re-evaluated within the evaluation programme. These substances should be included in the list referred to in Regulation (EC) No 2232/96.
- (7) Pursuant to Article 2(2) of Regulation (EC) No 1565/2000, substances contained in the register and classified by JECFA, since 2000, so as to present no safety concern on the basis of the default approach for estimation of intake, have to be considered by the Authority. Those substances, for which the Authority agreed with the JECFA conclusion, should be included in the list referred to in Regulation (EC) No 2232/96.
- (8) Flavouring substances may be used in or on foods in accordance with the good manufacturing practices or, if necessary, with specific conditions. The list referred to in Regulation (EC) No 2232/96 should contain information on the unique identification number of the substance (FL-No), the name of the substance (Chemical name), the Chemical Abstracts Service registry number, the JECFA number, the Council of Europe number, the purity, the specific conditions of use and reference to the scientific body that has carried or is carrying out the evaluation.
- (9) For the purpose of this Regulation, the food categories as laid down in Annex II to Regulation (EC) No 1333/2008 of the European Parliament and of the Council of 16 December 2008 on food additives ⁽⁹⁾, should be referred to. When necessary, interpretation decisions can be adopted in accordance with Article 13(c) of Regulation (EC) No 1334/2008 in order to clarify whether or not a particular food belongs to a certain category of food.
- (10) Flavouring substances which did not receive a favourable assessment on their safety have been listed in Part A of Annex III to Regulation (EC) No 1334/2008 concerning substances which shall not be added as such to food or have been deleted from the register by Commission Decisions 2005/389/EC ⁽¹⁰⁾, 2006/252/EC ⁽¹¹⁾ and 2008/478/EC ⁽¹²⁾.
- (11) Flavouring substances for which the requested information has not been provided and which, therefore, have not been evaluated by the Authority in accordance with Article 3(5) of Regulation (EC) No 1565/2000, should not be included in the list referred to in Regulation (EC) No 2232/96.
- (12) Flavouring substances for which the persons responsible for placing them on the market have withdrawn the application should not be included in the list referred to in Regulation (EC) No 2232/96.
- (13) For a number of substances, the Authority has not completed the evaluation or it has requested additional scientific data to be provided for completion of the evaluation. In accordance with the objectives of Regulations (EC) No 2232/96 and (EC) No 1334/2008 and in order to enhance legal certainty it is appropriate to include those substances in the list referred to in Regulation (EC) No 2232/96 to allow those substances which are currently placed on the market, to continue to be used in or on foods until risk assessment and authorisation procedures have been concluded.
- (14) To manage the submissions of additional scientific data requested by the Authority, time limits should be set for the persons responsible for placing flavouring substances on the market so as to comply with the Authority's requests as expressed in the published opinions. Therefore, footnotes 2 to 4 have been assigned for those substances for which the Authority has requested additional scientific data in the list referred to in Regulation (EC) No 2232/96. A time limit should be set for the Authority to evaluate the submitted data. Where the necessary information is not provided by the time requested the flavouring substance in question may not be evaluated in accordance with Article 3(5) of Regulation (EC) No 1565/2000 and therefore will be withdrawn from the Union list in accordance with the procedure laid down in Article 7 of Regulation (EC) No 1331/2008 of the European Parliament and of the Council ⁽¹³⁾.

⁽⁶⁾ Annex 6 to the minutes of the 98th meeting of the Scientific Committee on Food, 21 and 22 September 1995.

⁽⁷⁾ Flavouring substances and natural sources of flavourings, Volume I, *Chemically-defined flavouring substances*, Fourth Edition. Council of Europe, *Partial agreement in the social and public health field*, Strasbourg, 1992, including its subsequent loose-leaf modifications until year 1999.

⁽⁸⁾ Evaluation of certain food additives and contaminants. 46th Report of the Joint FAO/WHO Expert Committee on Food Additives, WHO Technical Report Series No. 868, 1997.

49th Report of the Joint FAO/WHO Expert Committee on Food Additives, WHO Technical Report Series No. 884, 1999.

51st Report of the Joint FAO/WHO Expert Committee on Food Additives, WHO Technical Report Series, No. 891, 2000.

53rd Report of the Joint FAO/WHO Expert Committee on Food Additives, WHO Technical Report Series, No. 896, 2000.

⁽⁹⁾ OJ L 354, 31.12.2008, p. 16.

⁽¹⁰⁾ OJ L 128, 21.5.2005, p. 73.

⁽¹¹⁾ OJ L 91, 29.3.2006, p. 48.

⁽¹²⁾ OJ L 163, 24.6.2008, p. 42.

⁽¹³⁾ OJ L 354, 31.12.2008, p. 1.

- (15) Flavouring substances for which the Authority has not yet completed the evaluation and no request for additional information is pending, should be identified as such by footnote 1 in the list referred to in Regulation (EC) No 2232/96.
- (16) If the authorised flavouring substance is a racemate (an equal mixture of optical isomers), both the R- and S-form should also be authorised for use. If only the R-form is authorised then the S-form should not be covered by that authorisation and vice versa.
- (17) Several D- and D,L-amino acids have been evaluated as safe by the Authority for use as flavouring substances, provided that the substances are in an unchanged form when they are consumed. Therefore, the amino acids should be included in the list referred to in Regulation (EC) No 2232/96 concerning their use as flavouring substances only.
- (18) The list referred to in Regulation (EC) No 2232/96 is intended only to regulate the use of flavouring substances which are added to food in order to impart or modify odour and/or taste. Certain substances on the list may be also added to food for other purposes than flavouring and such uses remain subject to other rules. For some substances it is necessary to lay down a use level which refers to their use as a flavouring substance. These substances are caffeine (FL 16.016), theobromine (FL 16.032), neohesperidin dihydrochalcone (FL 16.061) and rebaudioside A (FL 16.113). For ammonium chloride (FL 16.048) national provisions are already in place. Therefore, for ensuring the functioning of the internal market the use levels should be harmonised.
- (19) The Authority has recommended, in its opinion adopted on 22 May 2008 ⁽¹⁴⁾, that for d-camphor (FL 07.215) a maximum use level should be set to ensure that exposure to d-camphor does not exceed 2 mg/kg body weight on a single day in any age group. Therefore, specific conditions of use should be set for d-camphor.
- (20) SCF concluded in its opinion adopted on 19 February 1988 ⁽¹⁵⁾, that it saw no objection from a toxicological point of view to the continued use at present levels (up to max 100 mg/l) of quinine in bitter drinks. The Authority does not contest this evaluation but recommends that the toxicological database on quinine should be reconsidered ⁽¹⁶⁾. Pending the re-evaluation of quinine, the use of three quinine salts (FL 14.011, FL 14.152 and FL 14.155) should be restricted to non-alcoholic and alcoholic drinks.
- (21) The Authority considered glycyrrhizic acid and its ammoniated form in the opinion adopted on 22 May 2008 ⁽¹⁷⁾. The Authority agreed with the evaluation by the SCF ⁽¹⁸⁾, which considered that the intake up to 100 mg/person/day would not give rise to safety concerns. Therefore, specific conditions of use should be set for glycyrrhizic acid (FL 16.012) and its ammoniated form (FL 16.060) as flavouring substances.
- (22) Regulation (EC) No 1334/2008 repeals Regulation (EC) No 2232/96 from the date of application of the list referred to in Article 2(2) of that Regulation. It is therefore appropriate, for reasons of legal certainty, to fix the date of application of that list. The principle of mutual recognition laid down in Regulation (EC) No 2232/96 should however continue to apply to flavouring substances included in the Annex to this Regulation for which footnotes 1 to 4 have been assigned. Regulation (EC) No 2232/96 will cease to apply and will become obsolete once the risk assessment and authorisation procedures for those flavouring substances have been concluded.
- (23) The evaluation programme provided for by Regulation (EC) No 1565/2000 was intended for the establishment of the list referred to in Article 2(2) of Regulation (EC) No 2232/96. With the establishment of that list Regulation (EC) No 1565/2000 becomes obsolete and should be repealed. It should however continue to apply to flavouring substances included in the Annex to this Regulation for which footnotes 1 to 4 have been assigned. Regulation (EC) No 1565/2000 will cease to apply and will become obsolete once the risk assessment and authorisation procedures for those flavouring substances have been concluded.
- (24) The register of flavouring substances used in or on foods adopted by Decision 1999/217/EC has become obsolete with the establishment of the list referred to in Article 2(2) of Regulation (EC) No 2232/96 and should be repealed.

⁽¹⁴⁾ Scientific opinion of the Panel on Food Additives, Flavourings, Processing Aids and Materials in contact with Food (AFC) on a request from the Commission on Camphor in flavourings and other food ingredients with flavouring properties. The EFSA Journal 729, 1-15.

⁽¹⁵⁾ Report of the Scientific Committee for Food on Quinine (opinion expressed on 19 February 1988). In Food - Science and techniques. Reports of the Scientific Committee for Food twenty-first series. Internal Market and Industrial Affairs Directorate-General.

⁽¹⁶⁾ Scientific Opinion of the Panel on Food Additives, Flavourings, Processing Aids and Materials in Contact with Food on a request from Commission on Flavouring Group Evaluation 35 (FGE.35). Three quinine salts from the Priority list from chemical group 30. The EFSA Journal (2008) 739, 1-18.

⁽¹⁷⁾ Scientific Opinion of the Panel on Food Additives, Flavourings, Processing Aids and Materials in Contact with Food (AFC) on a request from the Commission on Flavouring Group Evaluation 36 (FGE.36). Two triterpene glycosides from the priority list. The EFSA Journal (2008) 740, 1-19.

⁽¹⁸⁾ Opinion of the Scientific Committee on Food on glycyrrhizic acid and its ammonium salt (expressed on 4 April 2003). Scientific Committee on Food. SCF/CS/ADD/EDUL/225 Final. 10 April 2003. European Commission, Health & consumer Protection Directorate-General.

- (25) Regulation (EC) No 1334/2008 provides that the Union list of flavourings and source materials shall be established by introducing the list of flavouring substances referred to in Article 2(2) of Regulation (EC) No 2232/96 into Annex I to Regulation (EC) No 1334/2008 at the time of its adoption. The list of flavouring substances referred to in Article 2(2) of Regulation (EC) No 2232/96 should be introduced into Annex I to Regulation (EC) No 1334/2008 accordingly.
- (26) The Union list of flavourings and source materials is to apply without prejudice to other provisions laid down in sector specific legislation.
- (27) The use of flavourings and source materials in infant formulae, follow-on formulae, processed cereal-based foods and baby foods and dietary foods for special medical purposes intended for infants and young children as referred to in Directive 2009/39/EC of the European Parliament and of the Council of 6 May 2009 on foodstuffs intended for particular nutritional uses ⁽¹⁹⁾ will be harmonised in the future in the framework of specific rules to be adopted on the composition of foodstuffs intended for infants and young children. Meanwhile, the Member States should be able to apply national provisions in this matter stricter than the ones provided for in the list of flavouring substances referred to in Article 2(2) of Regulation (EC) No 2232/96.
- (28) Pursuant to Regulation (EC) No 1334/2008 flavouring substances not included in the Union list may be placed on the market as such and used in or on food until 18 months after the date of application of the Union list. Since flavouring substances are already on the market in the Member States, provisions have been made to ensure that the transition to a Union authorisation procedure is smooth. To this effect transitional periods have been laid down for food containing those flavouring substances in Commission Regulation (EU) No 873/2012 ⁽²⁰⁾.
- (29) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on Food Chain and Animal Health,
- (a) 'Union list' means the list of flavourings and source materials set out in Annex I to Regulation (EC) No 1334/2008;
- (b) 'evaluated flavouring substances' means substances for which the evaluation and approval have been completed at Union level. Those substances are assigned no footnotes in Part A of the Union list of flavourings and source materials;
- (c) 'flavouring substances under evaluation' means substances for which the risk assessment at Union level has not been completed at the time of entry into force of this Regulation. Those substances are assigned footnotes 1 to 4 in Part A of the Union list of flavourings and source materials.

Article 2

Adoption of the list of flavouring substances referred to in Regulation (EC) No 2232/96

The list of flavouring substances referred to in Article 2(2) of Regulation (EC) No 2232/96 is hereby adopted as set out in Part A of the Annex to this Regulation.

Article 3

Introduction of the list of flavouring substances into Regulation (EC) No 1334/2008

The text in the Annex to this Regulation is introduced into Annex I to Regulation (EC) No 1334/2008.

Article 4

Flavouring substances under evaluation

Flavouring substances under evaluation may be placed on the market and used in or on foods pending their inclusion as evaluated flavouring substances in Part A of the Union list or their removal from that list.

Article 5

Updating the list

Where necessary, Part A of the Union list shall be updated in accordance with the procedure referred to in Article 7 of Regulation (EC) No 1331/2008 as from the date of entry into force of this Regulation.

HAS ADOPTED THIS REGULATION:

Article 1

Definitions

For the purposes of this Regulation the following definitions shall apply:

⁽¹⁹⁾ OJ L 124, 20.5.2009, p. 21.

⁽²⁰⁾ See page 162 of this Official Journal.

*Article 6***Repeal of Regulation (EC) No 2232/96**

1. For the purposes of Article 24(2) of Regulation (EC) No 1334/2008, concerning the repeal of Regulation (EC) No 2232/96, the date of application of the list of flavouring substances referred to in Article 2(2) of Regulation (EC) No 2232/96 shall be 22 April 2013.

2. However, Articles 1 and 2, Article 3(1) and (2), and Article 4(1) and (2) of Regulation (EC) No 2232/96 and the Annex thereto shall continue to apply to flavouring substances under evaluation pending their inclusion as evaluated substances in Part A of the Union list or their removal from that list. References made in those Articles to the Register of flavouring substances shall be construed as references to Part A of the Union list.

*Article 7***Repeal of Regulation (EC) No 1565/2000**

Regulation (EC) No 1565/2000 is hereby repealed with effect from 22 April 2013. However it shall continue to apply to flavouring substances under evaluation.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 1 October 2012.

*Article 8***Repeal of Decision 1999/217/EC**

Decision 1999/217/EC is repealed with effect from 22 April 2013.

*Article 9***Provisions for foods for infants and young children**

Member States may apply national provisions which are more restrictive than Part A of the Union list as regards the use of flavouring substances in infant formulae, follow-on formulae, processed cereal-based foods and baby foods and dietary foods for special medical purposes intended for infants and young children as referred to in Directive 2009/39/EC. Those national measures must be essential to ensure that consumers are adequately protected and must be proportionate to the attainment of that objective.

*Article 10***Entry into force**

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

It shall apply from 22 April 2013.

For the Commission
The President
José Manuel BARROSO

ANNEX

UNION LIST OF FLAVOURINGS AND SOURCE MATERIALS

PART A

Union list of flavouring substances

SECTION 1

Content of the list

Table 1 contains the following information:

Column 1 (FL No.): the unique identification number of the substance

Column 2 (Chemical Name): the name of the substance

Column 3 (CAS No.): the Chemical Abstracts Service (CAS) registry number

Column 4 (JECFA No.): The Joint FAO/WHO Expert Committee on Food additives (JECFA) number

Column 5 (CoE No.): The Council of Europe (CoE) number

Column 6 (Purity of the named substance at least 95% unless otherwise specified): The purity of the named flavouring substance has to be at least 95%. If less, the composition of the flavouring substances is given in this column.

Column 7 (Restrictions of Use): The use of flavouring substances is permitted in accordance with good manufacturing practices unless specific restriction is given in this column. Flavouring substances with restrictions of use may only be added to the listed food categories and under the specified conditions of use. For the purpose of the restrictions the following food categories, as laid down in Annex II of Regulation (EC) No 1333/2008, shall be referred to:

Category number	Food category
1	Dairy products and analogues
2	Fats and oils and fat and oil emulsions
3	Edible ices
4.2	Processed fruit and vegetables
5	Confectionery
5.3	Chewing gum
6	Cereals and cereal products
7	Bakery wares
8	Meat
9	Fish and fisheries products
10	Eggs and egg products
11	Sugars, syrups, honey and table-top sweeteners
12	Salts, spices, soups, sauces, salads and protein products
13	Food intended for particular nutritional uses as defined by Directive 2009/39/EC ⁽¹⁾

Category number	Food category
14.1	Non-alcoholic beverages
14.2	Alcoholic beverages, including alcohol-free and low-alcoholic counterparts
15	Ready-to-eat savouries and snacks
16	Desserts excluding products covered in category 1, 3 and 4
17	Food supplements as defined in Directive 2002/46/EC ^(?) of the European Parliament and of the Council excluding food supplements for infants and young children
18	Processed food not covered by categories 1-17, excluding foods for infants and young children

⁽¹⁾ OJ L 124, 20.5.2009, p. 21.

⁽²⁾ OJ L 183, 12.7.2002, p. 51.

Column 8 (Footnotes): The footnote '1' is allocated to the flavouring substances for which the evaluation has to be completed by the Authority. The footnotes '2' to '4' refer to time limits set for the applicants to comply with the Authority's requests as expressed in the published opinions. Where the necessary information is not provided by the time requested, the flavouring substance in question will be withdrawn from the Union list. The Authority shall evaluate the submitted data within 9 months from the receipt of such data. Substances which have already been evaluated by JECFA can be recognised from the JECFA number listed in column 4.

⁽¹⁾ evaluation to be completed by the Authority

⁽²⁾ additional scientific data shall be submitted by 31 December 2012

⁽³⁾ additional scientific data shall be submitted by 30 June 2013

⁽⁴⁾ additional scientific data shall be submitted by 31 December 2013

Column 9 (Reference): Reference to the scientific body that has carried out the evaluation.

SECTION 2

Notes

Note 1: Ammonium, sodium, potassium and calcium salts as well as chlorides, carbonates and sulphates are covered by the generic substances, providing that they have flavouring properties.

Note 2: If the authorised flavouring substance is a racemate (an equal mixture of optical isomers), both the R- and S- form shall also be authorised for use. If only the R-form has been authorised then the S-form is not covered by this authorisation and vice versa.

Note 3: Maximum levels refer to levels in or on food as marketed. By way of derogation from that principle, for dried and/or concentrated foods which need to be reconstituted the maximum levels shall apply to the food as reconstituted according to the instructions in the labelling taking into account the minimum dilution factor.

Note 4: The presence of a flavouring substance shall be permitted:

- (a) in a compound food other than as referred to in the Annex, where the flavouring substance is permitted in one of the ingredients of the compound food;
- (b) in a food which is to be used solely in the preparation of a compound food and provided that the compound food complies with this Regulation.

Table 1

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
01.001	Limonene	138-86-3		491				EFSA
01.002	1-Isopropyl-4-methylbenzene	99-87-6	1325	620				EFSA
01.003	Pin-2(10)-ene	127-91-3	1330	2114			2	EFSA
01.004	Pin-2(3)-ene	80-56-8	1329	2113			2	EFSA
01.005	Terpinolene	586-62-9	1331	2115				EFSA
01.006	alpha-Phellandrene	99-83-2	1328	2117	At least 85%; secondary components 10-12% cymene and other terpene hydrocarbons			EFSA
01.007	beta-Caryophyllene	87-44-5	1324	2118	80-92% beta-caryophyllene and 15-19% C ₁₅ H ₂₄ terpene hydrocarbons (eg. valencene)		2	EFSA
01.008	Myrcene	123-35-3	1327	2197	At least 90%; secondary components C ₁₅ H ₂₄ terpene hydrocarbons (eg. valencene); Minimum assay value may include traces of limonene, alpha- and beta-pinene and other common C ₁₀ H ₁₆ terpenes.		4	EFSA
01.009	Camphene	79-92-5	1323	2227	At least 80%; secondary components 15-19% C ₁₅ H ₂₄ terpene hydrocarbons (eg. valencene)		2	EFSA
01.010	1-Isopropenyl-4-methylbenzene	1195-32-0	1333	2260				EFSA
01.014	1-Methylnaphthalene	90-12-0	1335	11009			4	JECFA/EFSA
01.015	Vinylbenzene	100-42-5		11022			1	EFSA
01.016	1,4(8),12-Bisabolatriene	495-62-5	1336	10979				EFSA
01.017	Valencene	4630-07-3	1337	11030	At least 94%; secondary components 1-4% other C ₁₅ H ₂₄ sesquiterpenes		2	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
01.018	beta-Ocimene	13877-91-3	1338	11015	At least 80%; secondary component 15-17% cis-beta-ocimene		4	EFSA
01.019	alpha-Terpinene	99-86-5	1339	11023	At least 89%; secondary components 6-7% 1,4- and 1,8-cineole			EFSA
01.020	gamma-Terpinene	99-85-4	1340	11025				EFSA
01.024	beta-Bourbonene	5208-59-3	1345	11931			2	EFSA
01.026	1(5),7(11)-Guaiadiene	88-84-6	1347				2	EFSA
01.027	Bisabola-1,8,12-triene	17627-44-0						EFSA
01.028	beta-Bisabolene	495-61-4						EFSA
01.029	delta-3-Carene	13466-78-9	1342	10983	At least 92%; secondary components 2-3% beta-pinene; 1-2% limonene; 1-2% myrcene; 0-1% p-cymene		2	EFSA
01.033	2,2-Dimethylhexane	590-73-8						EFSA
01.034	2,4-Dimethylhexane	589-43-5						EFSA
01.035	2,6-Dimethylocta-2,4,6-triene	673-84-7					2	EFSA
01.038	Dodecane	112-40-3						EFSA
01.039	delta-Elemene	20307-84-0		10996				EFSA
01.040	alpha-Farnesene	502-61-4	1343	10998	At least 38% alpha and 29% beta (sum of cis/trans isomers); secondary components 20% bisabolene, up to 10% other isomers (valencene, bourbonene, cadinene, guaiane)		4	EFSA
01.045	d-Limonene	5989-27-5	1326	491				EFSA
01.046	l-Limonene	5989-54-8		491				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
01.054	Pentadecane	629-62-9						EFSA
01.057	Tetradecane	629-59-4						EFSA
01.059	4(10)-Thujene	3387-41-5		11018			2	EFSA
01.061	Undeca-1,3,5-triene	16356-11-9	1341		At least 94% (sum of cis/trans isomers); secondary component 2,4,6-undecatriene (Z,Z,E)		4	EFSA
01.064	cis-3,7-Dimethyl-1,3,6-octatriene	3338-55-4					2	EFSA
01.070	1-Octene	111-66-0					2	EFSA
01.077	1-Methyl-1,3-cyclohexadiene	1489-56-1	1344					EFSA
02.001	2-Methylpropan-1-ol	78-83-1	251	49				JECFA
02.002	Propan-1-ol	71-23-8	82	50				JECFA
02.003	Isopentanol	123-51-3	52	51				JECFA
02.004	Butan-1-ol	71-36-3	85	52				JECFA
02.005	Hexan-1-ol	111-27-3	91	53				JECFA
02.006	Octan-1-ol	111-87-5	97	54				JECFA
02.007	Nonan-1-ol	143-08-8	100	55				JECFA
02.008	Dodecan-1-ol	112-53-8	109	56				JECFA
02.009	Hexadecan-1-ol	36653-82-4	114	57				JECFA
02.010	Benzyl alcohol	100-51-6	25	58				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
02.011	Citronellol	106-22-9	1219	59	At least 90%; secondary components 5-8% di-unsaturated and saturated C10 alcohols, 1% citronellyl acetate, 1% citronellal			EFSA
02.012	Geraniol	106-24-1	1223	60				EFSA
02.013	Linalool	78-70-6	356	61				JECFA
02.014	alpha-Terpineol	98-55-5	366	62				JECFA
02.015	Menthol	89-78-1	427	63				JECFA
02.016	DL-Borneol	507-70-0	1385	64				EFSA
02.017	Cinnamyl alcohol	104-54-1	647	65				EFSA
02.018	Nerolidol	7212-44-4	1646	67				EFSA
02.019	2-Phenylethan-1-ol	60-12-8	987	68				EFSA
02.020	Hex-2-en-1-ol	2305-21-7	1354				2	EFSA
02.021	Heptan-1-ol	111-70-6	94	70				JECFA
02.022	Octan-2-ol	123-96-6	289	71				JECFA
02.023	Oct-1-en-3-ol	3391-86-4	1152				1	EFSA
02.024	Decan-1-ol	112-30-1	103	73				JECFA
02.026	3,7-Dimethyloctan-1-ol	106-21-8	272	75	At least 90%; secondary components 5-7% geraniol and citronellol			JECFA
02.027	(-)-Rhodinol	6812-78-8	1222	76				EFSA
02.028	3,7-Dimethyloctan-3-ol	78-69-3	357	77				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
02.029	3,7,11-Trimethyldodeca-2,6,10-trien-1-ol	4602-84-0	1230	78				EFSA
02.030	alpha-Pentylcinnamyl alcohol	101-85-9	674	79				EFSA
02.031	3-Phenylpropan-1-ol	122-97-4	636	80				EFSA
02.033	1-Phenylpropan-1-ol	93-54-9	822	82				EFSA
02.034	1-Phenylpentan-2-ol	705-73-7	825	83				EFSA
02.035	2-Methyl-1-phenylpropan-2-ol	100-86-7	1653	84				EFSA
02.036	4-Phenylbutan-2-ol	2344-70-9	815	85				EFSA
02.037	3-Methyl-1-phenylpentan-3-ol	10415-87-9	1649	86				EFSA
02.038	Fenchyl alcohol	1632-73-1	1397	87				EFSA
02.039	4-Isopropylbenzyl alcohol	536-60-7	864	88				EFSA
02.040	Pentan-1-ol	71-41-0	88	514				JECFA
02.041	2-Methylbutan-2-ol	75-85-4		515				EFSA
02.042	2-(4-Methylphenyl)propan-2-ol	1197-01-9	1650	530	At least 90%; secondary component 9-11% p-isopropenyltoluene			EFSA
02.043	2-Ethylbutan-1-ol	97-95-0		543				SCF/CoE
02.044	Heptan-3-ol	589-82-2	286	544				JECFA
02.045	Heptan-2-ol	543-49-7	284	554				JECFA
02.047	3,7-Dimethyloctane-1,7-diol	107-74-4	610	559				JECFA
02.049	Nona-2,6-dien-1-ol	7786-44-9	1184	589			2	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
02.050	Pent-2-en-1-ol	20273-24-9	1793	665			2	EFSA
02.051	5-Phenylpentan-1-ol	10521-91-2	675	674				EFSA
02.052	2-Methylpropan-2-ol	75-65-0		698				EFSA
02.054	p-Menthane-1,8-diol	80-53-5		701				EFSA
02.055	3,5,5-Trimethylhexan-1-ol	3452-97-9	268	702				JECFA
02.056	Hex-3(cis)-en-1-ol	928-96-1	315	750c				JECFA
02.057	Undecan-1-ol	112-42-5	106	751				JECFA
02.058	(Z)-Nerol	106-25-2	1224	2018				EFSA
02.059	DL-Isoborneol	124-76-5	1386	2020	At least 92%; secondary component 3-5% borneol			EFSA
02.060	p-Mentha-1,8-dien-7-ol	536-59-4	974				2	EFSA
02.061	Dihydrocarveol	619-01-2	378	2025				JECFA
02.062	Carveol	99-48-9	381	2027				JECFA
02.063	d-Neomenthol	2216-52-6	428	2028				JECFA
02.064	1-Phenylethan-1-ol	98-85-1	799	2030				EFSA
02.065	4-Methyl-1-phenylpentan-2-ol	7779-78-4	827	2031				EFSA
02.066	4-Phenylbut-3-en-2-ol	17488-65-2	819				2	EFSA
02.067	1R,2S,5R-isopulegol	89-79-2	755	2033			4	EFSA
02.070	Cyclohexanol	108-93-0		2138				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
02.071	p-Menthan-2-ol	499-69-4	376	2228				JECFA
02.072	4-Terpinenol	562-74-3	439	2229				JECFA
02.073	2-Phenylpropan-1-ol	1123-85-9	1459	2257				EFSA
02.074	Hex-4-en-1-ol	6126-50-7	318	2295				JECFA
02.075	(1R,2S,5S)-neo-Dihydrocarveol	18675-33-7		2296				EFSA
02.076	2-Methylbutan-1-ol	137-32-6	1199	2346				EFSA
02.077	Pentan-3-ol	584-02-1		2349				EFSA
02.078	Ethanol	64-17-5	41	11891				JECFA
02.079	Isopropanol	67-63-0	277					JECFA
02.080	1-(p-Tolyl)ethan-1-ol	536-50-5	805	10197				EFSA
02.081	2,6-Dimethylheptan-4-ol	108-82-7	303	11719	At least 90%; secondary component 8-9% 2-heptanol			JECFA
02.082	2-Ethylhexan-1-ol	104-76-7	267	11763				JECFA
02.083	p-Menth-1-en-3-ol	491-04-3	434	10248				JECFA
02.085	Sabinene hydrate	546-79-2	441	10309				JECFA
02.086	Undecan-2-ol	1653-30-1	297	11826				JECFA
02.087	Nonan-2-ol	628-99-9	293	11803				JECFA
02.088	Pentan-2-ol	6032-29-7	280	11696				JECFA
02.089	Hexan-3-ol	623-37-0	282	11775				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
02.090	Non-2(trans)-en-1-ol	31502-14-4	1365	10292			2	EFSA
02.091	Myrtenol	515-00-4	981	10285			2	EFSA
02.092	Dehydrodihydroionol	57069-86-0	397	10195	At least 70%; secondary component 25-27% tetrahydroionone			JECFA
02.093	Non-6-en-1-ol	35854-86-5	324	10294				JECFA
02.094	Oct-3-en-1-ol	20125-84-2	321	10296				JECFA
02.095	2-Ethylfenchol	18368-91-7	440	10208				JECFA
02.096	1-Terpinenol	586-82-3	373	10252				JECFA
02.097	beta-Terpineol	138-87-4	374	10254				JECFA
02.098	Octan-3-ol	589-98-0	291	11715				JECFA
02.099	Pent-1-en-3-ol	616-25-1	1150	11717			1	EFSA
02.100	Pinocarveol	5947-36-4	1403	10303				EFSA
02.101	Pin-2-en-4-ol	473-67-6	1404	10304				EFSA
02.102	Oct-3-en-2-ol	76649-14-4	1140				1	EFSA
02.103	Decan-3-ol	1565-81-7	295	10194				JECFA
02.104	Hex-1-en-3-ol	4798-44-1	1151	10220			1	EFSA
02.105	4-(2,6,6-Trimethyl-2-cyclohexenyl)but-3-en-2-ol	25312-34-9	391				2	JECFA
02.106	4-(2,2,6-Trimethyl-1-cyclohexenyl)but-3-en-2-ol	22029-76-1	392		At least 92%; secondary components 3-8% ionol and ionone		2	JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
02.107	Dihydro-beta-ionol	3293-47-8	395					JECFA
02.108	2-Methyl-4-phenylbutan-2-ol	103-05-9	1477	10281				EFSA
02.109	3-Methylbut-2-en-1-ol	556-82-1	1200	11795				EFSA
02.110	2,6-Dimethylhept-6-en-1-ol	36806-46-9	348		At least 90%; secondary component 5-10% 6-methyl-5-hepten-2-one			JECFA
02.111	3-Methylbutan-2-ol	598-75-4	300					JECFA
02.112	Non-2(cis)-en-1-ol	41453-56-9	1369	10292			2	EFSA
02.113	Oct-5(cis)-en-1-ol	64275-73-6	322		At least 90%; secondary component 7-9% trans-5-octen-1-ol			JECFA
02.114	2-(2,2,3-Trimethylcyclopent-3-enyl)ethan-1-ol	1901-38-8	970					EFSA
02.115	3-Methylpentan-1-ol	589-35-5	263	10275				JECFA
02.119	Cedrenol	28231-03-0		10189				EFSA
02.120	(+)-Cedrol	77-53-2		10190				EFSA
02.121	Butan-2-ol	78-92-2		11735				SCF/CoE
02.122	p-Mentha-1,8(10)-dien-9-ol	3269-90-7					2	EFSA
02.123	2-Methylbut-3-en-2-ol	115-18-4		11794				EFSA
02.124	6-Methylhept-5-en-2-ol	1569-60-4		10264				EFSA
02.125	Undec-10-en-1-ol	112-43-6		10319				EFSA
02.126	Tetradecan-1-ol	112-72-1		10314				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
02.128	p-Anisyl alcohol	105-13-5	871	66				EFSA
02.129	(l)-alpha-Bisabolol	23089-26-1		10178	Sum of isomers at least 95%			EFSA
02.131	But-3-en-2-ol	598-32-3					1	EFSA
02.132	Butane-1,3-diol	107-88-0						EFSA
02.133	Butane-2,3-diol	513-85-9		10181				EFSA
02.134	2-Cyclohexylethan-1-ol	4442-79-9						EFSA
02.135	Cyclopentanol	96-41-3		10193				EFSA
02.136	Dec-1-en-3-ol	51100-54-0	1153				1	EFSA
02.137	Dec-2-en-1-ol	22104-80-9	1794	11750			2	EFSA
02.138	Dec-9-en-1-ol	13019-22-2						EFSA
02.139	Deca-2,4-dien-1-ol	18409-21-7	1189				2	EFSA
02.140	1,2-Dihydrolinalool	2270-57-7						EFSA
02.141	2-(6,6-Dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethan-1-ol	128-50-7	986					EFSA
02.142	3,3-Dimethylbutan-2-ol	464-07-3						EFSA
02.144	2,6-Dimethyloct-7-en-2-ol	18479-58-8						EFSA
02.145	2,6-Dimethylocta-1,5,7-trien-3-ol	29414-56-0					1	EFSA
02.146	(E)-3,7-Dimethylocta-1,5,7-trien-3-ol	53834-70-1		10202	At least 93%; secondary components 2-3% linalool, 1-2% linalool oxide and up to 1% nerol oxide		4	EFSA
02.147	3,6-Dimethyloctan-3-ol	151-19-9						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
02.148	Dodecan-2-ol	10203-28-8		11760				EFSA
02.149	(-)-alpha-Elemol	639-99-6		10205				EFSA
02.150	(E,E)-geranyl linalool	1113-21-9						EFSA
02.152	Hept-3-en-1-ol	10606-47-0		10219				EFSA
02.153	Hepta-2,4-dien-1-ol	33467-79-7	1784				2	EFSA
02.154	Heptadecan-1-ol	1454-85-9						EFSA
02.155	1-Hepten-3-ol	4938-52-7	1842	10218			1	EFSA
02.156	Hex-2(cis)-en-1-ol	928-94-9	1374	69	At least 92%; secondary component 3-4% hex-2(trans)-en-1-ol		2	EFSA
02.159	Hex-3-en-1-ol	544-12-7	315	750				SCF/CoE
02.162	Hexa-2,4-dien-1-ol	111-28-4	1174				2	EFSA
02.164	4-Hydroxy-3,5-dimethoxybenzyl alcohol	530-56-3						EFSA
02.165	4-Hydroxybenzyl alcohol	623-05-2	955					EFSA
02.166	2-(4-Hydroxyphenyl)ethan-1-ol	501-94-0		10226				EFSA
02.167	(1R,2R,5S)-Isodihydrocarveol	18675-35-9						EFSA
02.168	Isophytol	505-32-8		10233				EFSA
02.170	(R)-(-)-Lavandulol	498-16-8						EFSA
02.171	p-Menthan-8-ol	498-81-7						EFSA
02.173	3-(4-Methoxyphenyl)propan-1-ol	5406-18-8						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
02.174	2-Methylbut-2-en-1-ol	4675-87-0		10258			1	EFSA
02.175	2-Methylbut-3-en-1-ol	4516-90-9		10259				EFSA
02.176	3-Methylbut-3-en-1-ol	763-32-6		10260				EFSA
02.177	2-Methylhexan-3-ol	617-29-8		10266				EFSA
02.178	2-Methyloctan-1-ol	818-81-5						EFSA
02.180	4-Methylpentan-1-ol	626-89-1		10278				EFSA
02.181	2-Methylpentan-2-ol	590-36-3		10274				EFSA
02.182	3-Methylpentan-2-ol	565-60-6		10276				EFSA
02.183	4-Methylpentan-2-ol	108-11-2		10279				EFSA
02.184	3-Methylpentan-3-ol	77-74-7		10277				EFSA
02.186	Myrtanol	514-99-8						EFSA
02.187	Non-1-en-3-ol	21964-44-3		10291			1	EFSA
02.188	Nona-2,4-dien-1-ol	62488-56-6	1183	11802	At least 92%; secondary component 3-4% 2-nonen-1-ol		2	EFSA
02.189	(Z,Z)-Nona-3,6-dien-1-ol	76649-25-7	1283	10289				EFSA
02.190	Nonan-3-ol	624-51-1		10290				EFSA
02.192	Oct-2-en-1-ol	22104-78-5					2	EFSA
02.193	Oct-2-en-4-ol	4798-61-2	1141				1	EFSA
02.194	Octa-1,5-dien-3-ol	83861-74-9					1	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
02.195	Octa-(3Z,5E)-dien-1-ol	70664-96-9						EFSA
02.196	Octadecan-1-ol	112-92-5						EFSA
02.197	1,2,3,4,4a,5,6,7-Octahydro-2,5,5-trimethylnaphthalen-2-ol	41199-19-3		10173				EFSA
02.198	Octane-1,3-diol	23433-05-8						EFSA
02.201	Pent-4-en-1-ol	821-09-0						EFSA
02.202	Pentadecan-1-ol	629-76-5						EFSA
02.203	2-Phenylpropan-2-ol	617-94-7		11704				EFSA
02.204	Phytol	150-86-7	1832	10302				EFSA
02.205	Piperonyl alcohol	495-76-1		10306				EFSA
02.206	(-)-Sclareol	515-03-7		10311				EFSA
02.207	Thujyl alcohol	21653-20-3	1865					EFSA
02.209	3,3,5-Trimethylcyclohexan-1-ol	116-02-9	1099					EFSA
02.210	Undec-2-en-1-ol	37617-03-1	1384				2	EFSA
02.211	Undeca-1,5-dien-3-ol	56722-23-7					1	EFSA
02.213	Vanillyl alcohol	498-00-0	886	690				EFSA
02.214	Vetiverol	89-88-3	1866	10321			2	EFSA
02.216	12-beta-Santalén-14-ol	77-42-9		74			2	EFSA
02.217	12-alpha-Santalén-14-ol	115-71-9		74			2	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
02.219	2,6-Dimethyl-2-heptanol	13254-34-7						EFSA
02.222	3-Pentenol-1	39161-19-8		10298				EFSA
02.224	3-(1-Methoxy)propane-1,2-diol	87061-04-9	1408					EFSA
02.226	[S-(cis)]-3,7,11-Trimethyl-1,6,10-dodecatrien-3-ol	142-50-7		67				EFSA
02.229	(-)-3,7-Dimethyl-6-octen-1-ol	7540-51-4			At least 90% cis-isomer; secondary components 2-6% di-unsaturated and saturated C10 alcohols, 2-4% citronellyl acetate and 2-3% citronellal		1	EFSA
02.230	Terpineol	8000-41-7			Sum of isomers: 91-99 %. Relative contribution of each isomer: 55-75% alpha, 16-23% gamma, 1-10% cis-beta, 1-13% trans-beta, 0-1% delta			EFSA
02.231	trans-2, cis-6-Nonadien-1-ol	28069-72-9					2	EFSA
02.234	(Z)-Non-3-en-1-ol	10340-23-5		10293				EFSA
02.242	2-Butoxyethan-1-ol	111-76-2		10182				EFSA
02.243	(E,Z)-3,6-Nonadien-1-ol	56805-23-3	1284		At least 92%; secondary component 6% (E,E)-3,6-nonadien-1-ol			EFSA
02.245	2,3,4-Trimethyl-3-pentanol	3054-92-0	1643					EFSA
02.246	p-Menthane-3,8-diol	42822-86-6	1416					EFSA
02.247	l-Menthoxyethanol	38618-23-4	1853					EFSA
02.248	Vanillin 3-(l-menthoxy)propane-1,2-diol acetal	180964-47-0	1879					EFSA
02.249	(4Z)-Hepten-1-ol	6191-71-5	1280					EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
02.250	2,4,8-Trimethyl-7-nonen-2-ol	437770-28-0	1644					EFSA
02.251	2,4,8-Trimethyl-3,7-nonadien-2-ol	479547-57-4	1645					EFSA
02.252	4,8-Dimethyl-3,7-nonadien-2-ol	67845-50-5	1841				1	EFSA
02.253	2,4-Dimethyl-4-nonanol	74356-31-3	1850					EFSA
02.254	(1R, 2S, 5S)-3-Methoxy-2-methyl-propane-1,2-diol	195863-84-4	1411					EFSA
02.255	(Z)-4-Hepten-2-ol	66642-85-1			At least 91%; secondary components (E)-4-hepten-2-ol (4-5%), 2-heptanol (up to 1%), trans-3-hepten-2-ol (up to 1%) cis-3-hepten-2-ol (up to 1%).			EFSA
03.001	1,8-Cineole	470-82-6	1234	182				EFSA
03.003	Benzyl ethyl ether	539-30-0	1252	521				EFSA
03.004	Dibenzyl ether	103-50-4	1256	11856				EFSA
03.005	2-Butyl ethyl ether	2679-87-0	1231	10911				EFSA
03.006	2-Methoxyethyl benzene	3558-60-9	1254	11812				EFSA
03.007	1,4-Cineole	470-67-7	1233	11225	At least 75%; secondary component 20-25% 1,8-cineole.			EFSA
03.008	2-Acetoxy-1,8-cineole	57709-95-2						EFSA
03.010	Benzyl butyl ether	588-67-0	1253	520	At least 93%; secondary component 2-5% benzyl alcohol			EFSA
03.011	Benzyl methyl ether	538-86-3		10910				EFSA
03.012	Benzyl octyl ether	54852-64-1						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
03.015	Ethyl geranyl ether	40267-72-9						EFSA
03.016	Hexyl methyl ether	4747-07-3						EFSA
03.019	Prenyl ethyl ether	22094-00-4	1232					EFSA
03.020	alpha-Terpinyll methyl ether	14576-08-0						EFSA
03.022	1-Methoxy-1-decene	79930-37-3	1802					EFSA
03.023	1-Ethoxyethyl acetate	1608-72-6						EFSA
03.024	Digeranyl ether	31147-36-1						EFSA
04.002	6-Ethoxyprop-3-enylphenol	94-86-0	1264	170				EFSA
04.003	Eugenol	97-53-0	1529	171				EFSA
04.004	Isoeugenol	97-54-1	1260	172				EFSA
04.005	2-Methoxyphenol	90-05-1	713	173				EFSA
04.006	Thymol	89-83-8	709	174				EFSA
04.007	2-Methoxy-4-methylphenol	93-51-6	715	175				EFSA
04.008	4-Ethylguaiacol	2785-89-9	716	176				EFSA
04.009	2-Methoxy-4-vinylphenol	7786-61-0	725	177				EFSA
04.010	1-Methoxy-4-(prop-1(trans)-enyl)benzene	4180-23-8	217	183				JECFA
04.013	1,2-Dimethoxy-4-(prop-1-enyl)benzene	93-16-3	1266	186				EFSA
04.014	1-Methoxy-2-methylbenzene	578-58-5	1242	187				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
04.015	1-Methoxy-4-methylbenzene	104-93-8	1243	188				EFSA
04.016	1,3-Dimethoxybenzene	151-10-0	1249	189				EFSA
04.017	1-Ethoxy-2-methoxy-4-(prop-1-enyl)benzene	7784-67-0	1267	190				EFSA
04.018	Benzyl isoeugenyl ether	120-11-6	1268	522				EFSA
04.019	2,5-Dimethylphenol	95-87-4	706	537				EFSA
04.020	3,5-Dimethylphenol	108-68-9		538				EFSA
04.021	3-Ethylphenol	620-17-7		549				EFSA
04.022	4-Ethylphenol	123-07-9	694	550				EFSA
04.026	3-Methylphenol	108-39-4	692	617				EFSA
04.027	2-Methylphenol	95-48-7	691	618				EFSA
04.028	4-Methylphenol	106-44-5	693	619				EFSA
04.029	Benzene-1,2-diol	120-80-9		680				SCF/CoE
04.031	Carvacrol	499-75-2	710	2055				EFSA
04.032	Anisole	100-66-3	1241	2056				EFSA
04.033	beta-Naphthyl ethyl ether	93-18-5	1258	2058				EFSA
04.034	1,4-Dimethoxybenzene	150-78-7	1250	2059				EFSA
04.035	Diphenyl ether	101-84-8	1255	2201				EFSA
04.036	2,6-Dimethoxyphenol	91-10-1	721	2233				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
04.037	4-Ethoxyphenol	622-62-8	720	2258				EFSA
04.038	Carvacryl ethyl ether	4732-13-2	1247	11840				EFSA
04.039	1-Methoxy-4-propylbenzene	104-45-0	1244	11835				EFSA
04.040	1,2-Dimethoxy-4-vinylbenzene	6380-23-0	1251	11228				EFSA
04.041	Phenol	108-95-2	690	11811				EFSA
04.042	2,6-Dimethylphenol	576-26-1	707	11261				EFSA
04.043	1-Isopropyl-2-methoxy-4-methylbenzene	1076-56-8	1246	11245				EFSA
04.044	2-Isopropylphenol	88-69-7	697	11234				EFSA
04.045	2-(Ethoxymethyl)phenol	20920-83-6	714	11905				EFSA
04.046	2-Propylphenol	644-35-9	695	11908				EFSA
04.047	Benzene-1,3-diol	108-46-3	712	11250				EFSA
04.048	3,4-Dimethylphenol	95-65-8	708	11262				EFSA
04.049	2-Methoxy-4-propylphenol	2785-87-7	717					EFSA
04.050	4-Propylphenol	645-56-7	696					EFSA
04.051	4-Allyl-2,6-dimethoxyphenol	6627-88-9	726	11214				EFSA
04.052	4-Ethyl-2,6-dimethoxyphenol	14059-92-8	723	11231				EFSA
04.053	4-Methyl-2,6-dimethoxyphenol	6638-05-7	722					EFSA
04.054	Isobutyl beta-naphthyl ether	2173-57-1	1259	11886				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
04.055	2,6-Dimethoxy-4-prop-1-enylphenol	20675-95-0	1265					EFSA
04.056	2,6-Dimethoxy-4-propylphenol	6766-82-1	724					EFSA
04.057	4-Vinylphenol	2628-17-3	711	11257				EFSA
04.058	4-Allylphenol	501-92-8	1527	11218				EFSA
04.059	Carvacryl methyl ether	6379-73-3		11224				EFSA
04.061	2,6-Dimethoxy-4-vinylphenol	28343-22-8		11229				EFSA
04.062	1,2-Dimethoxybenzene	91-16-7	1248	10320				EFSA
04.063	1,3-Dimethyl-4-methoxybenzene	6738-23-4	1245					EFSA
04.064	4-(1,1-Dimethylethyl)phenol	98-54-4	733					EFSA
04.065	2,3-Dimethylphenol	526-75-0		11258				EFSA
04.066	2,4-Dimethylphenol	105-67-9		11259				EFSA
04.067	1-Ethoxy-2-methoxybenzene	17600-72-5						EFSA
04.068	1-Ethoxy-4-methoxybenzene	5076-72-2						EFSA
04.069	1-Ethyl-4-methoxybenzene	1515-95-3						EFSA
04.070	2-Ethylphenol	90-00-6		11232				EFSA
04.072	3-Isopropylphenol	618-45-1						EFSA
04.073	4-Isopropylphenol	99-89-8						EFSA
04.074	2-Methoxynaphthalene	93-04-9	1257					EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
04.075	1-Methoxynaphthalene	2216-69-5						EFSA
04.076	3-Methoxyphenol	150-19-6						EFSA
04.077	4-Methoxyphenol	150-76-5		11241				EFSA
04.078	5-Methyl-2-(tert-butyl)phenol	88-60-8						EFSA
04.079	Methyl 4-methoxybenzyl ether	1515-81-7						EFSA
04.084	1,2,3-Trimethoxybenzene	634-36-6						EFSA
04.085	2,3,6-Trimethylphenol	2416-94-6	737					EFSA
04.088	1-Methoxy-4-(1-propenyl)benzene	104-46-1		183				CoE
04.091	Ethyl 4-hydroxybenzyl ether	57726-26-8						EFSA
04.092	4-Hydroxybenzyl methyl ether	5355-17-9						EFSA
04.093	Butyl vanillyl ether	82654-98-6	888					EFSA
04.094	Ethyl 4-hydroxy-3-methoxybenzyl ether	13184-86-6	887					EFSA
04.095	2,4,6-Trimethyl phenol	527-60-6						EFSA
04.096	2-Methoxy-6-(2-propenyl)phenol	579-60-2	1528					EFSA
04.097	4-Prop-1-enylphenol	539-12-8						EFSA
05.001	Acetaldehyde	75-07-0	80	89				JECFA
05.002	Propanal	123-38-6	83	90				JECFA
05.003	Butanal	123-72-8	86	91				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
05.004	2-Methylpropanal	78-84-2	252	92				JECFA
05.005	Pentanal	110-62-3	89	93				JECFA
05.006	3-Methylbutanal	590-86-3	258	94				JECFA
05.007	2-Ethylbutanal	97-96-1	256	95				JECFA
05.008	Hexanal	66-25-1	92	96				JECFA
05.009	Octanal	124-13-0	98	97	At least 92%; secondary component 4-7% 2-methyl-heptanal			JECFA
05.010	Decanal	112-31-2	104	98	At least 92%; secondary component 4-7% 2-methyl-nonanal			JECFA
05.011	Dodecanal	112-54-9	110	99	At least 92%; secondary components 3-6% tetradecanal; 2-5% decanal; 1-2% hexadecanal			JECFA
05.012	3,7-Dimethyl-7-hydroxyoctanal	107-75-5	611	100				JECFA
05.013	Benzaldehyde	100-52-7	22	101				EFSA
05.014	Cinnamaldehyde	104-55-2	656	102				EFSA
05.015	4-Methoxybenzaldehyde	123-11-5	878	103				EFSA
05.016	Piperonal	120-57-0	896	104				EFSA
05.017	Veratraldehyde	120-14-9	877	106				EFSA
05.018	Vanillin	121-33-5	889	107				EFSA
05.019	Ethyl vanillin	121-32-4	893	108				EFSA
05.020	Citral	5392-40-5	1225	109				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
05.021	Citronellal	106-23-0	1220	110	At least 85%; secondary components 12-14% mixture of terpenoid materials (mainly 1,8-cineole, 2-isopropylidene-5-methylcyclohexanol, linalool, citronellyl acetate and other naturally occurring terpenes)			EFSA
05.022	4-Isopropylbenzaldehyde	122-03-2	868	111				EFSA
05.023	2,6-Dimethyloctanal	7779-07-9	273	112				JECFA
05.024	2-Methyloctanal	7786-29-0	270	113				JECFA
05.025	Nonanal	124-19-6	101	114	At least 92%; secondary component 4-8% 2-methyl-octanal			JECFA
05.026	o-Tolualdehyde	529-20-4					1	EFSA
05.027	Tolualdehyde	1334-78-7	866	115	At least 95% (sum of o,m,p-isomers)			EFSA
05.028	m-Tolualdehyde	620-23-5					1	EFSA
05.029	p-Tolualdehyde	104-87-0					1	EFSA
05.030	Phenylacetaldehyde	122-78-1	1002	116				EFSA
05.031	Heptanal	111-71-7	95	117	At least 92%; secondary component 4-7% 2-methyl-hexanal			EFSA
05.032	Tetradecanal	124-25-4	112	118	At least 85%; secondary components 10-12% dodecanal, hexadecanal, and octadecanal			JECFA
05.033	2-Ethylhept-2-enal	10031-88-6	1216	120			1	EFSA
05.034	Undecanal	112-44-7	107	121	At least 92%; secondary component 4-8% 2-methyl-decanal			JECFA
05.035	Undec-10-enal	112-45-8	330	122				JECFA
05.036	Undec-9-enal	143-14-6	329	123				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
05.037	2-Dodecenal	4826-62-4	1350	124	At least 93%; secondary component 3-4% 2-dodecenoic acid		2	EFSA
05.038	2-Phenylpropanal	93-53-8	1467	126				EFSA
05.039	alpha-Butylcinnamaldehyde	7492-44-6	684	127				EFSA
05.040	alpha-Pentylcinnamaldehyde	122-40-7	685	128				EFSA
05.041	alpha-Hexylcinnamaldehyde	101-86-0	686	129				EFSA
05.042	p-Tolylacetaldehyde	104-09-6	1023	130				EFSA
05.043	2-(p-Tolyl)propionaldehyde	99-72-9	1471	131				EFSA
05.044	p-Isopropyl phenylacetaldehyde	4395-92-0	1024	132				EFSA
05.045	3-(p-Cumenyl)-2-methylpropionaldehyde	103-95-7	1465	133	At least 90%; secondary component 5% 3-(p-cumenyl)-2-methylpropionic acid			EFSA
05.046	2-Methyl-4-phenylbutyraldehyde	40654-82-8	1462	134				EFSA
05.047	4-Hydroxybenzaldehyde	123-08-0	956	558				EFSA
05.048	2-Methoxycinnamaldehyde	1504-74-1	688	571	At least 94%; secondary component 3% o-methoxycinnamic acid			EFSA
05.049	2-Methylbutyraldehyde	96-17-3	254	575				JECFA
05.050	alpha-Methylcinnamaldehyde	101-39-3	683	578				EFSA
05.051	3-(4-Methoxyphenyl)-2-methylprop-2-enal	65405-67-6	689	584				EFSA
05.052	2-Methyl-3-(p-tolyl)propionaldehyde	41496-43-9	1466	587				EFSA
05.053	2,4,6-Trimethyl-1,3,5-trioxane	123-63-7		594				SCF/CoE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
05.055	Salicylaldehyde	90-02-8	897	605				EFSA
05.056	4-Ethoxybenzaldehyde	10031-82-0	879	626				EFSA
05.057	Hexa-2(trans),4(trans)-dienal	142-83-6	1175	640			2	EFSA
05.058	Nona-2(trans),6(cis)-dienal	557-48-2	1186	659	At least 92%; secondary component 4-7% (E,E)-2,6-nonadienal		2	EFSA
05.059	Non-6(cis)-enal	2277-19-2	325	661	At least 90%; secondary component 6-9% trans-6-nonenal			JECFA
05.060	Oct-2-enal	2363-89-5	1363	663	At least 92%; secondary components 3-4% 2-octenoic acid and ethyl octanoate		2	EFSA
05.061	Oct-6-enal	63826-25-5		664				EFSA
05.062	2-Phenylcrotonaldehyde	4411-89-6	1474	670			2	EFSA
05.064	Trideca-2(trans),4(cis),7(cis)-trienal	13552-96-0	1198	685	At least 71%; secondary components 14% 4-cis-7-cis-tridecadienol; 6% 3-cis-7-cis-tridecadienol; 5% 2-trans-7-cis-tridecadienal; 3% 2-trans-4-trans-7-cis-tridecatrienal		2	EFSA
05.066	4-Ethoxy-3-methoxybenzaldehyde	120-25-2		703				EFSA
05.068	4-Ethylbenzaldehyde	4748-78-1	865	705				EFSA
05.069	2-Methylpentanal	123-15-9	260	706				JECFA
05.070	2-Heptenal	2463-63-0	1360	730			2	SCF/CoE
05.071	Nona-2,4-dienal	6750-03-4	1185	732	At least 89%; secondary components 5-6% 2,4-nonadien-1-ol and 1-2% 2-nonen-1-ol		2	EFSA
05.072	trans-2-Nonenal	18829-56-6		733	At least 92%; secondary component 3-4% 2-nonenic acid		2	CoE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
05.073	Hex-2(trans)-enal	6728-26-3	1353	748	At least 92%; secondary component 3-4% 2-hexenoic acid		2	CoE
05.074	2,6-Dimethylhept-5-enal	106-72-9	349	2006	At least 85%; secondary components 9-10% 6-methyl-5-hepten-2-one; 1-2% 2,6-dimethyl-6-heptenal			JECFA
05.075	Hex-3(cis)-enal	6789-80-6	316	2008				JECFA
05.076	Dec-2-enal	3913-71-1	1349	2009	At least 92%; secondary components 3-4% 2-decenoic acid		2	EFSA
05.077	2-Methylundecanal	110-41-8	275	2010				JECFA
05.078	Tridec-2-enal	7774-82-5	1359	2011	At least 92%; secondary components 3-4% 2-tridecenoic acid		2	EFSA
05.079	Citronellyl oxycetaldehyde	7492-67-3	592	2012	At least 75%; secondary components 20-21% geranyloxyacetaldehyde; 1-2% citronellol			EFSA
05.080	3-Phenylpropanal	104-53-0	645	2013				EFSA
05.081	2,4-Decadienal	2363-88-4			At least 89%; secondary components mixture of the (cis, cis)-; (cis, trans)- and (trans, cis)- 2,4-decadienals (sum of all isomers 95%); acetone and isopropanol		2	EFSA
05.082	(Z,Z)-3,6-Dodecadienal	13553-09-8		2121				EFSA
05.084	Hepta-2,4-dienal	4313-03-5	1179	729	At least 92%; secondary components 2-4% (E,Z)-2,4-heptadienal and 2-4% 2,4-heptadienoic acid		2	EFSA
05.085	Hept-4-enal	6728-31-0	320	2124				JECFA
05.090	2-Methylpent-2-enal	623-36-9	1209	2129	At least 92%; secondary components 1.5-2.5% propionaldehyde and 3.5-4.5% propionic acid		1	EFSA
05.091	2-Hydroxy-4-methylbenzaldehyde	698-27-1	898	2130				EFSA
05.094	3-(4-Isopropylphenyl)propionaldehyde	7775-00-0	680	2261	85-90% p-isomer and 5-10% o-isomer			EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
05.095	2-Methylcrotonaldehyde	497-03-0	1201	2281			1	EFSA
05.096	4-Decenal	30390-50-2	326	2297				JECFA
05.097	3-Methyl-2-phenylbutyraldehyde	2439-44-3	1463	135				EFSA
05.098	p-Menth-1-en-9-al	29548-14-9	971	10347				EFSA
05.099	5-Methyl-2-phenylhex-2-enal	21834-92-4	1472	10365			2	EFSA
05.100	4-Methyl-2-phenylpent-2-enal	26643-91-4	1473	10366			2	EFSA
05.101	Penta-2,4-dienal	764-40-9	1173	11695			2	EFSA
05.102	Pent-2-enal	764-39-6	1364	10375			2	EFSA
05.103	3-Phenylpent-4-enal	939-21-9	679	10378				EFSA
05.104	2,6,6-Trimethylcyclohexa-1,3-diene-1-carbaldehyde	116-26-7	977	10383				EFSA
05.105	2-Butylbut-2-enal	25409-08-9	1214	10324			1	EFSA
05.106	Myrtenal	564-94-3	980	10379			2	EFSA
05.107	2-Isopropyl-5-methylhex-2-enal	35158-25-9	1215	10361			1	EFSA
05.108	Undeca-2,4-dienal	13162-46-4	1195	10385			2	EFSA
05.109	2-Undecenal	2463-77-6	1366	11827			2	EFSA
05.110	2,4-Dimethylbenzaldehyde	15764-16-6	869					EFSA
05.111	Octa-2(trans),6(trans)-dienal	56767-18-1	1182	10371			2	EFSA
05.112	2,6,6-Trimethylcyclohex-1-en-1-acetaldehyde	472-66-2	978	10338	At least 92%; secondary components 2-3% beta-cyclocitral; 0.5-1% beta-ionone; 2-4% methyl beta-homocyclogeranate; 0.6-1% ethyl beta-homocycloger-anate			EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
05.113	Hex-4-enal	4634-89-3	319	10337				JECFA
05.114	4-Methylpent-2-enal	5362-56-1	1208	10364			2	EFSA
05.115	2-Phenylpent-4-enal	24401-36-3	1476	10377				EFSA
05.116	3,5,5-Trimethylhexanal	5435-64-3	269	10384				JECFA
05.117	p-Mentha-1,8-dien-7-al	2111-75-3	973	11788			2	EFSA
05.118	4-Methoxycinnamaldehyde	1963-36-6	687	11919				EFSA
05.119	(1R) 2,2,3-Trimethylcyclopent-3-en-1-yl acetaldehyde	4501-58-0	967	10325				EFSA
05.120	Dodeca-2,6-dienal	21662-13-5	1197				2	EFSA
05.121	2,6,6-Trimethyl-1-cyclohexen-1-carboxaldehyde	432-25-7	979	2133			2	EFSA
05.122	p-Methylcinnamaldehyde	1504-75-2	682	10352				EFSA
05.123	(1R,2R,5S) 5-Isopropenyl-2-methylcyclopentanecarboxaldehyde	55253-28-6	968					EFSA
05.124	3-Methylcrotonaldehyde	107-86-8	1202	10354				EFSA
05.125	Dodeca-2,4-dienal	21662-16-8	1196	11758	At least 85%; secondary component 11-12% 2-trans-4-cis isomer		2	EFSA
05.126	2-Methyloct-2-enal	49576-57-0	1217	10363			1	EFSA
05.127	Octa-2(trans),4(trans)-dienal	30361-28-5	1181	11805			2	EFSA
05.128	Oct-5(cis)-enal	41547-22-2	323		At least 85%; secondary component 10-15% trans-5-octenal			JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
05.129	2-Methoxybenzaldehyde	135-02-4		10350				EFSA
05.134	2-Methyl-3-tolylpropionaldehyde (mixed o,m,p-)			587	At least 95% (sum of isomers p-80%; o-10%; m-5%)			CoE
05.137	Dec-4(cis)-enal	21662-09-9			At least 90%; secondary component at least 5% trans-isomer		1	EFSA
05.139	Dec-9-enal	39770-05-3	1286					EFSA
05.140	Deca-2(trans),4(trans)-dienal	25152-84-5	1190	2120	At least 89%; secondary components 3-4% mixture of (cis-cis)-; (cis-trans)- and (trans-cis)- 2,4-decadienals; 3-4% acetone and trace of isopropanol		2	EFSA
05.141	Deca-2,4,7-trienal	51325-37-2	1786				2	EFSA
05.142	3,4-Dihydroxybenzaldehyde	139-85-5		10328				EFSA
05.143	2,5-Dimethyl-2-vinylhex-4-enal	56134-05-5						EFSA
05.144	Dodec-2(trans)-enal	20407-84-5			At least 93%; secondary component 2-3% 2-dodecenoic acid		2	EFSA
05.147	2-Ethylhexanal	123-05-7		10331				EFSA
05.148	Farnesal	19317-11-4	1228					EFSA
05.149	Glutaraldehyde	111-30-8						EFSA
05.150	Hept-2(trans)-enal	18829-55-5	1360	730			2	EFSA
05.152	Hexadecanal	629-80-1		10336				EFSA
05.153	4-Hydroxy-3,5-dimethoxybenzaldehyde	134-96-3	1878	10340				EFSA
05.154	(E)-4-Hydroxy-3,5-dimethoxycinnamaldehyde	4206-58-0		10341				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
05.155	4-Hydroxy-3-methoxycinnamaldehyde (mixture of isomers)	458-36-6		10342				EFSA
05.156	3-(4-Hydroxy-3-methoxyphenyl)propanal	80638-48-8						EFSA
05.157	Isocyclocitral	1335-66-6						EFSA
05.158	3-Methoxybenzaldehyde	591-31-1		10351				EFSA
05.159	p-Methoxyphenylacetaldehyde	5703-26-4						EFSA
05.160	2-Methyldecanal	19009-56-4						EFSA
05.164	2-Methylhexanal	925-54-2						EFSA
05.166	4-Methylpentanal	1119-16-0		10369				EFSA
05.167	12-Methyltetradecanal	75853-50-8						EFSA
05.169	12-Methyltridecanal	75853-49-5	1229					EFSA
05.170	Neral	106-26-3					1	EFSA
05.171	Non-2-enal	2463-53-8	1362	733	At least 92%; secondary component 3-4% 2-nonenic acid		2	EFSA
05.172	Nona-2(trans),6(trans)-dienal	17587-33-6	1187				2	EFSA
05.173	Nona-2,4,6-trienal	57018-53-8	1785				2	EFSA
05.174	Pent-4-enal	2100-17-6	1619					EFSA
05.175	2-Phenylpent-2-enal	3491-63-2					2	EFSA
05.179	(E)-Tetradec-2-enal	51534-36-2	1803				2	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
05.182	2,6,6-Trimethylcyclohex-2-ene-1-carboxaldehyde	432-24-6					1	EFSA
05.183	4-(2,6,6-Trimethylcyclohexenyl)-2-methylbutanal	73398-85-3						EFSA
05.184	Undec-2(trans)-enal	53448-07-0					2	EFSA
05.186	2,4-Octadienal	5577-44-6					2	EFSA
05.188	trans-3,7-Dimethylocta-2,6-dienal	141-27-5					1	EFSA
05.189	2-Hexenal	505-57-7			At least 92%; secondary component 3-4% 2-hexenoic acid		2	EFSA
05.190	trans-2-Octenal	2548-87-0			At least 92%; secondary components 3-4% 2-octenoic acid and ethyl octanoate		2	EFSA
05.191	trans-2-Decenal	3913-81-3			At least 92%; secondary component 3-4% 2-decenoic acid		2	EFSA
05.192	3-Hexenal	4440-65-7	1271		At least 80% (total of cis- and trans-isomers); secondary component 18-20% trans-2-hexenal.			EFSA
05.194	tr-2, tr-4-Nonadienal	5910-87-2			At least 89%; secondary components at least 5% 2,4-nonadien-1-ol and 2-nonen-1-ol and other isomers of 2,4-nonadienal		2	EFSA
05.195	trans-2-Tridecenal	7069-41-2			At least 92%; secondary components 2-5% 2-tridecenoic acid and 3-5% cis-2-tridecenal		2	EFSA
05.196	tr-2, tr-4-Undecadienal	30361-29-6		10385			2	EFSA
05.198	3-Butenal, 2-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-	58102-02-6						EFSA
05.203	9-Octadecenal	5090-41-5	1641					EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
05.208	Z-8-Tetradecenal	169054-69-7	1640					EFSA
05.211	6-Methyloctanal	30689-75-9						EFSA
05.217	(Z)-5-Decenal	21662-08-8						EFSA
05.218	16-Octadecenal	56554-87-1						EFSA
05.219	3-Methylhexanal	19269-28-4						EFSA
05.220	4Z-Dodecenal	21944-98-9	1636		At least 94% of (4Z)-dodecenal; secondary component 3-4% dodecanal			EFSA
05.221	6,6'-Dihydroxy-5,5'-dimethoxy-biphenyl-3,3'-dicarbaldehyde	2092-49-1	1881					EFSA
05.222	2-Phenyl-4-methyl-2-hexenal	26643-92-5					2	EFSA
05.223	4-Ethylloctanal	58475-04-0	1819					EFSA
05.224	(4E)-hexenal	25166-87-4	1622					EFSA
05.225	6-Methylheptanal	63885-09-6						EFSA
05.226	E-4-Undecenal	68820-35-9						EFSA
06.001	1,1-Diethoxyethane	105-57-7	941	35				EFSA
06.002	5-Hydroxy-2-phenyl-1,3-dioxane	1708-40-3	838	36	At least 98% (sum of 5-hydroxy-2-phenyl-1,3-dioxane and 2-phenyl-4-hydroxymethyl-1,3-dioxalane)			EFSA
06.003	alpha,alpha-Dimethoxytoluene	1125-88-8	837	37				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
06.004	Citral diethyl acetal	7492-66-2	948	38	At least 98% (sum of isomers + hemiacetals + citral)			EFSA
06.005	Citral dimethyl acetal	7549-37-3	944	39	At least 98% (sum of isomers + hemiacetals + citral)			EFSA
06.006	1,1-Dimethoxy-2-phenylethane	101-48-4	1003	40				EFSA
06.007	Phenylacetaldehyde glyceryl acetal	29895-73-6	1004	41	57% 5-hydroxymethyl-2-phenyl-1,3-dioxolan; 38% 5-hydroxy-2-phenyl-1,3-dioxan			EFSA
06.008	1,1-Dimethoxyoctane	10022-28-3	942	42				EFSA
06.009	1,1-dimethoxydecane	7779-41-1	945	43				EFSA
06.010	1,1-Diethoxy-3,7-dimethyloctan-7-ol	7779-94-4	613	44				JECFA
06.011	1,1-Dimethoxy-3,7-dimethyloctan-7-ol	141-92-4	612	45				JECFA
06.012	Tolualdehyde glyceryl acetal	1333-09-1	867	46	40% 5-hydroxydioxane; 60% 5-hydroxymethyldioxalane			EFSA
06.013	alpha-Pentylcinnamaldehyde dimethyl acetal	91-87-2	681	47				EFSA
06.014	Cinnamaldehyde ethylene glycol acetal	5660-60-6	648	48				EFSA
06.015	1,1-Dimethoxyethane	534-15-6	940	510				EFSA
06.016	1-Phenylethoxy-1-propoxy ethane	7493-57-4	1000	511				EFSA
06.017	(Diethoxymethyl)benzene	774-48-1		517				EFSA
06.019	1-Benzyloxy-1-(2-methoxyethoxy)ethane	7492-39-9	840	523				EFSA
06.020	1,1-Diethoxydecane	34764-02-8		531				SCF/CoE
06.021	1,1-Diethoxyheptane	688-82-4		553				SCF/CoE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
06.023	1,1-Diethoxyhexane	3658-93-3		557				SCF/CoE
06.024	1,1-Di-isobutoxy-2-phenylethane	68345-22-2	1006	595				EFSA
06.025	1,1-Diethoxynona-2,6-diene	67674-36-6	946	660			2	EFSA
06.027	4,5-Dimethyl-2-benzyl-1,3-dioxolan	5468-06-4	1005	669	At least 93%; secondary component 2-3% butane-2,3-diol			EFSA
06.028	1,1-Dimethoxyheptane	10032-05-0	947	2015				EFSA
06.029	Heptanal glyceryl acetal (mixed 1,2 and 1,3 acetals)	72854-42-3	912	2016	Mixture of acetals (56-58% dioxolane; 37-39% dioxane) and 1-2% unreacted heptanal			EFSA
06.030	1,1-Dimethoxy-2-phenylpropane	90-87-9	1468	2017				EFSA
06.031	1,1-Diethoxyhex-2-ene	54306-00-2	1383	2135			2	EFSA
06.032	4-Methyl-2-phenyl-1,3-dioxolane	2568-25-4	839	2226				EFSA
06.033	1,1-Dibutoxyethane	871-22-7		2341				SCF/CoE
06.034	1,1-Dipropoxyethane	105-82-8		2342				SCF/CoE
06.035	Citral propylene glycol acetal	10444-50-5		2343				SCF/CoE
06.036	1-Butoxy-1-(2-phenylethoxy)ethane	64577-91-9	1001	10007				EFSA
06.037	1,1-Diethoxyhept-4-ene (cis and trans)	1192738-48-9	949	10011				EFSA
06.038	4,4-Dimethoxybutan-2-one	5436-21-5	593	10029				JECFA
06.039	1,2-Di((1'-ethoxy)-ethoxy)propane	67715-79-1	927					EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
06.040	1,2,3-Tris([1'-ethoxy]-ethoxy)propane	67715-82-6	913	11930				EFSA
06.041	1-Isobutoxy-1-ethoxy-2-methylpropane			10055				EFSA
06.042	1-Isobutoxy-1-ethoxy-3-methylbutane	85136-40-9		10057				EFSA
06.043	1-Isoamyloxy-1-ethoxypropane	238757-30-7		10038				EFSA
06.044	1-Isobutoxy-1-ethoxypropane	67234-04-2		10058				EFSA
06.045	1-Isobutoxy-1-isopentyloxy-2-methylpropane			10061				EFSA
06.046	1-Isobutoxy-1-isopentyloxy-3-methylbutane			10060				EFSA
06.047	1-Isopentyloxy-1-propoxyethane	238757-63-6		10065				EFSA
06.048	1-Isopentyloxy-1-propoxypropane	238757-65-8		10066				EFSA
06.049	1-Butoxy-1-(2-methylbutoxy)ethane	77249-20-8						EFSA
06.050	1-Butoxy-1-ethoxyethane	57006-87-8		10003				EFSA
06.051	1,1-Di-(2-methylbutoxy)ethane	13535-43-8						EFSA
06.052	1,1-Di-isobutoxy-2-methylpropane	13262-24-3		10025				EFSA
06.053	1,1-Di-isobutoxyethane	5669-09-0		10023				EFSA
06.054	1,1-Di-isobutoxypentane	13262-27-6		10026				EFSA
06.055	1,1-Di-isopentyloxyethane	13002-09-0	1729	10028				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
06.057	1,1-Diethoxy-2-methylbutane	3658-94-4		10013				EFSA
06.058	1,1-Diethoxy-2-methylpropane	1741-41-9		10015				EFSA
06.059	1,1-Diethoxy-3-methylbutane	3842-03-3	1730	10014				EFSA
06.061	1,1-Diethoxybutane	3658-95-5		10009				EFSA
06.062	1,1-Diethoxydodecane	53405-98-4						EFSA
06.063	(Z)-1,1-diethoxyhex-3-ene	73545-18-3						EFSA
06.064	Diethoxymethane	462-95-3		10012				EFSA
06.065	1,1-Diethoxynonane	54815-13-3		10016				EFSA
06.066	1,1-Diethoxyoctane	54889-48-4						EFSA
06.067	1,1-Diethoxypentane	3658-79-5		10017				EFSA
06.069	1,1-Diethoxypropane	4744-08-5		10018				EFSA
06.070	1,1-Diethoxyundecane	53405-97-3						EFSA
06.071	1,1-Dihexyloxyethane	5405-58-3		10022				EFSA
06.072	1,1-Dimethoxyhex-2(trans)-ene	18318-83-7	1728				2	EFSA
06.073	1,1-Dimethoxyhexane	1599-47-9						EFSA
06.074	Dimethoxymethane	109-87-5		10031				EFSA
06.075	1,1-Dimethoxypentane	26450-58-8						EFSA
06.076	1,1-Dimethoxypropane	4744-10-9						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
06.077	2,4-Dimethyl-1,3-dioxolane	3390-12-3	1711					EFSA
06.078	1,1-Diphenethoxyethane	122-71-4						EFSA
06.079	1-Ethoxy-1-(2-methylbutoxy)ethane	13602-09-0		10040				EFSA
06.080	1-Ethoxy-1-(2-phenylethoxy)ethane	2556-10-7		10049				EFSA
06.081	(Z)-1-Ethoxy-1-(3-hexenyloxy)ethane	28069-74-1	943	10034				EFSA
06.082	1-Ethoxy-1-hexyloxyethane	54484-73-0		11948				EFSA
06.083	1-Ethoxy-1-isopentyloxyethane	13442-90-5		10037				EFSA
06.084	1-Ethoxy-1-methoxyethane	10471-14-4		10039				EFSA
06.085	1-Ethoxy-1-pentyloxyethane	13442-89-2		10046				EFSA
06.086	1-Ethoxy-1-propoxyethane	20680-10-8		10050				EFSA
06.087	Ethyl 2,4-dimethyl-1,3-dioxolane-2-acetate	6290-17-1	1715					EFSA
06.088	2-Ethyl-4-methyl-1,3-dioxolane	4359-46-0						EFSA
06.089	2-Hexyl-4,5-dimethyl-1,3-dioxolane	6454-22-4	1712					EFSA
06.090	4-Hydroxymethyl-2-methyl-1,3-dioxolane	3773-93-1						EFSA
06.091	1-Isobutoxy-1-ethoxyethane	6986-51-2		10054				EFSA
06.092	1-Isobutoxy-1-isopentyloxyethane	75048-15-6		10059				EFSA
06.094	4-Methyl-2-pentyl-1,3-dioxolane	1599-49-1	928					EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
06.095	4-Methyl-2-propyl-1,3-dioxolane	4352-99-2						EFSA
06.096	Triethoxymethane	122-51-0		10903				EFSA
06.097	1,1,3-Triethoxypropane	7789-92-6		10075				EFSA
06.098	2,2,4-Trimethyl-1,3-dioxolane	1193-11-9	929	11423				EFSA
06.100	1,1-Dipentyloxyethane	13002-08-9		10032				EFSA
06.102	2-Hexyl-5-hydroxy-1,3-dioxane	1708-36-7		2016				EFSA
06.104	Vanillin propylene glycol acetal	68527-74-2	1882					EFSA
06.105	3-Methyl-1,1-di-isopentyloxybutane	13285-51-3		10070				EFSA
06.106	2-Methyl-1,1-di-isopentyloxypropane	13112-63-5		10071				EFSA
06.107	1-(2-Methylbutoxy)-1-isopentyloxyethane	13548-84-0		10068				EFSA
06.109	8,8-Diethoxy-2,6-dimethyloct-2-ene	71662-17-4						EFSA
06.111	1-Ethoxy-1-methoxypropane	127248-84-4						EFSA
06.114	1-Hexyloxy-1-isopentyloxyethane	233665-90-2						EFSA
06.115	1-isopentyloxy-1-pentyloxyethane	13442-92-7						EFSA
06.120	DL-Menthone-1,2-glycerol ketal	63187-91-7	446					JECFA
06.123	1-Butoxy-1-isopentyloxyethane	238757-27-2		10004				EFSA
06.124	1,1-Di-isobutoxy-3-methylbutane	13439-98-0		10024				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
06.125	1,1-Di-isobutoxypropane	13002-11-4		10027				EFSA
06.128	1-Ethoxy-1-pentyloxybutane	3658-92-2		10045				EFSA
06.129	1-Ethoxy-2-methyl-1-isopentyloxypropane	253679-74-2		10043				EFSA
06.130	1-Ethoxy-2-methyl-1-propoxypropane	238757-42-1		10044				EFSA
06.131	1-Ethoxy-1-(3-methylbutoxy)-3-methylbutane	238757-35-2		10042				EFSA
06.132	Vanillin butan-2,3-diol acetal (mixture of stereo isomers)	63253-24-7	960					EFSA
06.133	1-Menthone-1,2-glycerol ketal	563187-91-7	445					JECFA
06.135	2-Isobutyl-4-methyl-1,3-dioxolane	18433-93-7	1732					EFSA
06.136	6-Isopropyl-3,9-dimethyl-1,4-dioxyspiro[4.5]decan-2-one	831213-72-0	1859		Sum of isomers 98% with at least 60-70% (3S,5R,6S,9R)-6-isopropyl-3,9-dimethyl-1,4-dioxyspiro[4.5]decan-2-one.			EFSA
06.137	Acetaldehyde ethyl isopropyl acetal	25334-93-4						EFSA
07.001	2-Oxopropanal	78-98-8	937	105				EFSA
07.002	Heptan-2-one	110-43-0	283	136				JECFA
07.003	Heptan-3-one	106-35-4	285	137				JECFA
07.004	Acetophenone	98-86-2	806	138				EFSA
07.005	Vanillyl acetone	122-48-5	730	139				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
07.007	alpha-Ionone	127-41-3	388	141			2	JECFA/ EFSA
07.008	beta-Ionone	14901-07-6	389	142			2	JECFA/EFSA
07.009	Methyl-alpha-ionone	7779-30-8	398	143	At least 90%; secondary component 5-6% methyl-beta-ionone		2	JECFA/ EFSA
07.010	Methyl-beta- ionone	127-43-5	399	144	At least 88%; secondary component 7-10% alpha- and beta-isomethylionone		2	JECFA/ EFSA
07.011	4-(2,5,6,6-Tetramethyl-2-cyclohexenyl)-3-buten-2-one	79-69-6	403	145			2	JECFA/ EFSA
07.012	Carvone	99-49-0	380	146				SCF/CoE
07.013	Methyl 2-naphthyl ketone	93-08-3	811	147				EFSA
07.014	Maltol	118-71-8	1480	148			2	EFSA
07.015	6-Methylhept-5-en-2-one	110-93-0	1120	149				EFSA
07.016	Undecan-2-one	112-12-9	296	150				JECFA
07.017	4-Methylpentan-2-one	108-10-1	301	151				JECFA
07.018	Hexan-2,3-dione	3848-24-6	412	152	At least 93%; secondary components 2-3% hexanediones			JECFA
07.019	Octan-2-one	111-13-7	288	153				JECFA
07.020	Nonan-2-one	821-55-6	292	154				JECFA
07.021	Undeca-2,3-dione	7493-59-6	417	155				JECFA
07.022	4-Methylacetophenone	122-00-9	807	156				EFSA
07.023	2,4-Dimethylacetophenone	89-74-7	809	157				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
07.024	4-Phenylbut-3-en-2-one	122-57-6	820	158			2	EFSA
07.025	4-Methyl-1-phenylpentan-2-one	5349-62-2	828	159				EFSA
07.026	4-(p-Tolyl)butan-2-one	7774-79-0	817	160				EFSA
07.027	3-Methyl-4-phenylbut-3-en-2-one	1901-26-4	821	161			2	EFSA
07.028	Benzoin	119-53-9	836	162				EFSA
07.029	4-(4-Methoxyphenyl)butan-2-one	104-20-1	818	163				EFSA
07.030	1-(4-Methoxyphenyl)pent-1-en-3-one	104-27-8	826	164			2	EFSA
07.031	Piperonyl acetone	55418-52-5		165				SCF/CoE
07.032	Benzophenone	119-61-9	831	166				EFSA
07.033	Isojasmone	11050-62-7	1115	167			2	EFSA
07.034	2-Hexylidenecyclopentan-1-one	17373-89-6	1106					EFSA
07.035	Tetramethyl ethylcyclohexenone (mixture of isomers)	17369-60-7	1111	168				EFSA
07.036	alpha-Isomethyl ionone	127-51-5	404	169			2	JECFA
07.038	4-Methoxyacetophenone	100-06-1	810	570				EFSA
07.040	1-Phenylpropan-1-one	93-55-0	824	599				EFSA
07.041	beta-Isomethyl ionone	79-89-0		650			2	EFSA
07.042	4-Isopropylacetophenone	645-13-6	808	651				EFSA
07.044	Pent-3-en-2-one	625-33-2	1124	666			1	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
07.045	2,2,6-Trimethylcyclohexanone	2408-37-9	1108	686				EFSA
07.046	Vanillylidene acetone	1080-12-2	732	691			2	EFSA
07.047	Ethyl maltol	4940-11-8	1481	692				EFSA
07.048	4-Hexen-3-one	2497-21-4	1125	718			1	EFSA
07.049	1-(4-Methoxyphenyl)-4-methylpent-1-en-3-one	103-13-9	829	719			2	EFSA
07.050	Acetone	67-64-1	139	737				JECFA
07.051	3-Hydroxybutan-2-one	513-86-0	405	749				JECFA
07.052	Diacetyl	431-03-8	408	752				JECFA
07.053	Butan-2-one	78-93-3	278	753				JECFA
07.054	Pentan-2-one	107-87-9	279	754				JECFA
07.055	4-(p-Hydroxyphenyl)butan-2-one	5471-51-2	728	755				EFSA
07.056	3-Methylcyclopentan-1,2-dione	80-71-7	418	758				JECFA
07.057	3-Ethylcyclopentan-1,2-dione	21835-01-8	419	759	At least 90%; secondary component 5-10% 3-ethylcyclopentan-1,2-dione (enolic form)			JECFA
07.058	Heptan-4-one	123-19-3	287	2034				JECFA
07.059	p-Menthan-3-one	10458-14-7					1	EFSA
07.060	Pentan-2,3-dione	600-14-6	410	2039	At least 93%; secondary component 2-3% 2,5-diethylcyclohexadien-1,4-dione (dimer of 2,3-pentadione)			JECFA
07.061	Allyl alpha-ionone	79-78-7	401	2040			2	JECFA/EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
07.062	Octan-3-one	106-68-3	290	2042				JECFA
07.063	4-Methylpentan-2,3-dione	7493-58-5	411	2043				JECFA
07.064	Heptan-2,3-dione	96-04-8	415	2044				JECFA
07.065	5-Hydroxyoctan-4-one	496-77-5	416	2045				JECFA
07.067	2R,5S-isopulegone	29606-79-9	754	2051			4	EFSA
07.069	Tetrahydro-pseudo-ionone	4433-36-7	1121	2053				EFSA
07.070	3-Benzylheptan-4-one	7492-37-7	830	2140				EFSA
07.071	Octane-4,5-dione	5455-24-3		2141				EFSA
07.072	6-Methylheptan-3-one	624-42-0		2143				EFSA
07.075	3,4-Dimethylcyclopentan-1,2-dione	13494-06-9	420	2234				JECFA
07.076	3,5-Dimethylcyclopentan-1,2-dione	13494-07-0	421	2235				JECFA
07.077	Hexan-3,4-dione	4437-51-8	413	2255				JECFA
07.078	d,l-Isomenthone	491-07-6	430	2259				JECFA
07.079	1-Phenylpropan-1,2-dione	579-07-7	833	2275				EFSA
07.080	3-Methylcyclohexan-1,2-dione	3008-43-3	425	2311				JECFA
07.081	Oct-1-en-3-one	4312-99-6	1148	2312			1	EFSA
07.082	Oct-2-en-4-one	4643-27-0	1129	2313			1	EFSA
07.083	beta-Damascone	23726-92-3	384	2340	At least 90%; secondary components 5-8% alpha- and delta-damascone		2	JECFA/EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
07.084	Pentan-3-one	96-22-0		2350				EFSA
07.086	1,3-Diphenylpropan-2-one	102-04-5	832	11839				EFSA
07.087	4-Methoxyphenylacetone	122-84-9	813	11836				EFSA
07.088	Methyl-delta-ionone	7784-98-7	400	11852			2	JECFA/EFSA
07.089	Nootkatone	4674-50-4	1398	11164	At least 93%; secondary component 3-4% dihydronootkatone		2	EFSA
07.090	1-Hydroxybutan-2-one	5077-67-8	1717	11102				EFSA
07.091	gamma-Ionone	79-76-5	390				2	JECFA/EFSA
07.092	p-Menthan-2-one	499-70-7	375	11128				JECFA
07.093	5-Methylhexan-2,3-dione	13706-86-0	414	11148				JECFA
07.094	3-Methyl-2-(pent-2(cis-enyl)cyclopent-2-en-1-one	488-10-8	1114	11786			2	EFSA
07.095	2-(sec-Butyl)cyclohexanone	14765-30-1	1109	11044	At least 94%; secondary component 2-2.5% 2-isobutyl cyclohexanone			EFSA
07.096	Hexan-3-one	589-38-8	281	11097				JECFA
07.097	3-(Hydroxymethyl)octan-2-one	59191-78-5	1839	11113	At least 90%; secondary component 7% 3-methylene-2-octanone			EFSA
07.098	3-Methylcyclohex-2-en-1-one	1193-18-6	1107	11134				EFSA
07.099	6-Methylhepta-3,5-dien-2-one	1604-28-0	1134	11143			1	EFSA
07.100	5-Methylhex-5-en-2-one	3240-09-3	1119	11150				EFSA
07.101	4-Methylpent-3-en-2-one	141-79-7	1131	11853			1	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
07.102	Pent-1-en-3-one	1629-58-9	1147	11179			1	EFSA
07.103	Tridecan-2-one	593-08-8	298	11194				JECFA
07.104	Hept-2-en-4-one	4643-25-8	1126	11093			1	EFSA
07.105	Hept-3-en-2-one	1119-44-4	1127	11094			1	EFSA
07.106	5-Methylhex-3-en-2-one	5166-53-0	1132	11149			1	EFSA
07.107	Oct-3-en-2-one	1669-44-9	1128	11170	At least 94%; secondary component 4-6% 4-octen-2-one		1	EFSA
07.108	beta-Damascenone	23696-85-7	387	11197			2	JECFA/ EFSA
07.109	2,6,6-Trimethylcyclohex-2-en-1,4-dione	1125-21-9	1857	11200			2	EFSA
07.112	3-Methyl-2-cyclopenten-1-one	2758-18-1	1105	11137			2	EFSA
07.113	Nonan-3-one	925-78-0	294	11160				JECFA
07.114	6,10,14-Trimethylpentadeca-5,9,13-trien-2-one	762-29-8	1123	11206				EFSA
07.115	3,4-Dehydrodihydro-beta-ionone	20483-36-7	396	11057	At least 70%; secondary component 25-27% tetrahydroionone			JECFA
07.117	3-Ethyl-2-hydroxy-4-methylcyclopent-2-en-1-one	42348-12-9	422	11077				JECFA
07.118	5-Ethyl-2-hydroxy-3-methylcyclopent-2-en-1-one	53263-58-4	423	11078				JECFA
07.119	2-Hydroxycyclohex-2-en-1-one	10316-66-2	424	11046				JECFA
07.120	2-Hydroxy-3,5,5-trimethylcyclohex-2-en-1-one	4883-60-7	426	11198				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
07.121	Dec-3-en-2-one	10519-33-2	1130	11751			1	EFSA
07.122	2,6-Dimethylheptan-4-one	108-83-8	302	11914	At least 80%; secondary component 15-17% 4,6-dimethyl-2-heptanone			JECFA
07.123	Geranylacetone	3796-70-1	1122	11088				EFSA
07.124	2-Hydroxyacetophenone	118-93-4	727	11784				EFSA
07.125	3-Hydroxypentan-2-one	3142-66-3	409	11115				JECFA
07.126	3,5,5-Trimethylcyclohex-2-en-1-one	78-59-1	1112	11918				EFSA
07.127	p-Mentha-1,4(8)-dien-3-one	491-09-8	757	11189			2	EFSA
07.128	Dihydrocarvone	7764-50-3	377	11703	At least 77%; secondary components 10-15% dihydrocarveol; 5-6% carvone; 2-3% carveol			JECFA
07.129	3-Methyl-5-propylcyclohex-2-en-1-one	3720-16-9	1113					EFSA
07.130	delta-Damascone	57378-68-4	386				2	JECFA/ EFSA
07.131	Dihydro-beta-ionone	17283-81-7	394	11060				JECFA
07.132	Dihydro-alpha-ionone	31499-72-6	393	11059				JECFA
07.134	alpha-Damascone	43052-87-5	385	11053			2	JECFA/EFSA
07.135	2,4-Dihydroxyacetophenone	28631-86-9	729	11884	23-25% 2,3-isomer; 19-22% 2,4-isomer; 19-20% 2,5-isomer; 20-21% 3,4-isomer and 15-18% 3,5-isomer			EFSA
07.136	4,4a,5,6-Tetrahydro-7-methylnaphthalen-2(3H)-one	34545-88-5	1405				2	EFSA
07.137	Pentadecan-2-one	2345-28-0	299	11808				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
07.139	5-Methylhept-2-en-4-one	81925-81-7	1133				1	EFSA
07.140	3-Methyl-2-pentylcyclopent-2-en-1-one	1128-08-1	1406				2	EFSA
07.142	Acetovanillone	498-02-2		11035				EFSA
07.146	d-Carvone	2244-16-8	380.1					JECFA
07.147	l-Carvone	6485-40-1	380.2					JECFA
07.148	Cyclohexanone	108-94-1	1100	11047				EFSA
07.149	Cyclopentanone	120-92-3	1101	11050				EFSA
07.150	Decan-2-one	693-54-9		11055				EFSA
07.151	Decan-3-one	928-80-3	1118	11056				EFSA
07.152	3,3-Diethoxybutan-2-one	51933-13-2						EFSA
07.153	(4R,4aS,6R,8aS)-1,10-Dihydronootkatone	20489-53-6	1407		At least 90%; secondary component 5-6% nootkatone			EFSA
07.154	1-(3,5-Dimethoxy-4-hydroxyphenyl)propan-1-one	5650-43-1		11106				EFSA
07.156	2,6-Dimethyloct-6-en-3-one (mixture of E and Z)	90975-15-8						EFSA
07.157	6,10-Dimethylundecan-2-one	1604-34-8		11068				EFSA
07.158	Dodecan-2-one	6175-49-1		11069				EFSA
07.159	d-Fenchone	4695-62-9	1396	551				EFSA
07.160	Heptadecan-2-one	2922-51-2		11089				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
07.161	Hex-1-en-3-one	1629-60-3					1	EFSA
07.162	Hex-5-en-2-one	109-49-9						EFSA
07.164	4-Hydroxy-3,5-dimethoxyacetophenone	2478-38-8		11105				EFSA
07.165	4-Hydroxy-4-methylpentan-2-one	123-42-2						EFSA
07.167	4-Hydroxyhexan-3-one	4984-85-4		11108				EFSA
07.168	2-Hydroxypiperitone	490-03-9						EFSA
07.169	1-Hydroxypropan-2-one	116-09-6		11101				EFSA
07.170	beta-Ionone epoxide	23267-57-4	1571	11202			2	EFSA
07.171	Isopinocampone	18358-53-7	1868	11125				EFSA
07.172	4-Isopropylcyclohex-2-en-1-one	500-02-7	1110	11127				EFSA
07.175	p-Menth-1-en-3-one	89-81-6	435	2052	At least 94%; secondary components 2-3% menthol and menthone			JECFA
07.176	trans-Menthone	89-80-5	429	2035				JECFA
07.177	7-Methyl-3-octenone-2	33046-81-0	1135		At least 94%; secondary components 2-4% 7-methyl-4-octen-2-one, 5,6-dimethyl-3-hepten-2one and 3-nonen-2-one		1	EFSA
07.178	3-Methylbutan-2-one	563-80-4		11131				EFSA
07.179	2-Methylcyclohexanone	583-60-8	1102					EFSA
07.180	3-Methylcyclohexanone	591-24-2	1103					EFSA
07.181	6-Methylheptan-2-one	928-68-7		11146				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
07.182	5-Methylheptan-3-one	541-85-5						EFSA
07.184	3-Methylnona-2,4-dione	113486-29-6	2032				4	JECFA/EFSA
07.185	3-Methylpentan-2-one	565-61-7		11157				EFSA
07.187	Non-2-en-4-one	32064-72-5		11162			1	EFSA
07.188	Non-3-en-2-one	14309-57-0	1136	11163			1	EFSA
07.189	Nonan-4-one	4485-09-0		11161				EFSA
07.190	Octa-1,5-dien-3-one	65213-86-7	1848				1	EFSA
07.193	1-Phenylbutan-1-one	495-40-9						EFSA
07.194	4-Phenylbutan-2-one	2550-26-7		11182				EFSA
07.195	1-Phenylpropan-2-one	103-79-7		11042				EFSA
07.196	Pin-2-en-4-one	80-57-9	1870	11186				EFSA
07.198	Pseudo-ionone	141-10-6		11191			1	EFSA
07.199	Tetradecan-2-one	2345-27-9		11192				EFSA
07.200	4-(2,5,6,6-Tetramethyl-1-cyclohexenyl)but-3-en-2-one	79-70-9					2	EFSA
07.201	Tridec-12-en-2-one	60437-21-0						EFSA
07.202	2,6,6-Trimethylcyclohex-2-en-1-one	20013-73-4					1	EFSA
07.203	3,3,5-Trimethylcyclohexan-1-one	873-94-9						EFSA
07.204	3,3,6-Trimethylhepta-1,5-dien-4-one	546-49-6					1	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
07.205	6,10,14-Trimethylpentadecan-2-one	502-69-2		11205				EFSA
07.206	4-(2,3,6-Trimethylphenyl)but-3-en-2-one	56681-06-2					2	EFSA
07.210	1-Nonene-3-one	24415-26-7					1	EFSA
07.214	alpha-Methyl naphthyl ketone	941-98-0						EFSA
07.215	d-Camphor	464-49-3	1395	140		In category 1 – not more than 16 mg/kg In categories 2 and 8 – not more than 50 mg/kg In category 3 – not more than 20 mg/kg In categories 5, 6, 7, 12 and 15 – not more than 100 mg/kg In category 14.1 – not more than 50 mg/l In category 14.2 – not more than 50 mg/l (except not more than 850 mg/l in <i>Schweden-bitter</i>)		EFSA
07.219	trans-3-Methyl-2-(2-pentenyl)-2-cyclopenten-1-one	6261-18-3					2	EFSA
07.224	tr-1-(2,6,6-Trimethyl-1-cyclohexen-1-yl)but-2-en-1-one	23726-91-2			At least 90%; secondary components 2-4% alpha-damascone and 2-4% delta-damascone		2	EFSA
07.225	cis-1-(2,6,6-Trimethyl-2-cyclohexen-1-yl)but-2-en-1-one	23726-94-5			At least 92%; secondary component 4% trans-isomer		2	EFSA
07.226	trans-1-(2,6,6-Trimethyl-2-cyclohexen-1-yl)but-2-en-1-one	24720-09-0					2	EFSA
07.231	alpha-Damascenone	35044-63-4					2	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
07.234	1-(4-Hydroxy-3-methoxyphenyl)-3-decanone	27113-22-0	2021					EFSA
07.236	(Z)-5-Octen-2-one	22610-86-2		11171				EFSA
07.238	3-Hydroxy-2-octanone	37160-77-3						EFSA
07.239	[R-(E)]-5-Isopropyl-8-methylnona-6,8-dien-2-one	2278-53-7	1840					EFSA
07.240	2-Methylheptan-3-one	13019-20-0	1156					EFSA
07.242	3-Hydroxy-4-phenylbutane-2-one	5355-63-5	2041		At least 93%; secondary component 3-5% 4-hydroxy-4-phenylbutan-2-one			EFSA
07.243	4-Hydroxyacetophenone	99-93-4						EFSA
07.244	(6E)-Methyl-3-hepten-2-one	20859-10-3	1138				1	EFSA
07.247	(E,E)-3,5-Octadien-2-one	30086-02-3	1139				1	EFSA
07.248	Octan-2,3-dione	585-25-1						EFSA
07.249	Undecan-6-one	927-49-1	1155					EFSA
07.254	2-Methoxyacetophenone	579-74-8						EFSA
07.255	l-Piperitone	4573-50-6	1856				1	EFSA
07.256	(E) & (Z)-4,8-Dimethyl-3,7-nonadiene-2-one	817-88-9	1137		At least 94%; secondary component 3-4% 4,8-dimethyl-3,7-nonadien-2-ol		1	EFSA
07.257	2-(3,7-Dimethyl-2,6-octadienyl)cyclopentanone	68133-79-9	1117					EFSA
07.258	6-Methyl-3-hepten-2-one	2009-74-7					1	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
07.259	2-Methyl-acetophenone	577-16-2	2044					EFSA
07.260	3-Hydroxy-5-methyl-2-hexanone	163038-04-8						EFSA
07.261	4-Methyl-3-hepten-5-one	22319-31-9					1	EFSA
07.262	9-decen-2-one	35194-30-0						EFSA
08.001	Formic acid	64-18-6	79	1				JECFA
08.002	Acetic acid	64-19-7	81	2				JECFA
08.003	Propionic acid	79-09-4	84	3				JECFA
08.004	Lactic acid	598-82-3	930	4				EFSA
08.005	Butyric acid	107-92-6	87	5				JECFA
08.006	2-Methylpropionic acid	79-31-2	253	6				JECFA
08.007	Valeric acid	109-52-4	90	7				JECFA
08.008	3-Methylbutyric acid	503-74-2	259	8				JECFA
08.009	Hexanoic acid	142-62-1	93	9				JECFA
08.010	Octanoic acid	124-07-2	99	10				JECFA
08.011	Decanoic acid	334-48-5	105	11				JECFA
08.012	Dodecanoic acid	143-07-7	111	12	At least 90%; secondary components 3-6% tetradecanoic acid; 2-5% decanoic acid; 1-2% hexadecanoic acid			JECFA
08.013	Oleic acid	112-80-1	333	13	At least 90%; secondary component 5-7% palmitic acid and other fatty acids			JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
08.014	Hexadecanoic acid	57-10-3	115	14	At least 80%; secondary components 8-11% octadecanoic acid; 5-7% tetradecanoic acid; 3-5% heptadecanoic acid; <1% pentadecanoic acid			JECFA
08.015	Octadecanoic acid	57-11-4	116	15	At least 40%; secondary components 5-50% hexadecanoic acid; <3% tetradecanoic acid; <5% 9-octadecenoic acid; <3% heptadecanoic acid; <2% eicosanoic acid; <1% pentadecanoic acid			JECFA
08.016	Tetradecanoic acid	544-63-8	113	16	At least 94%; secondary components 2-4% hexadecanoic acid; 1-3% dodecanoic acid			JECFA
08.017	l-Malic acid	6915-15-7	619	17				JECFA
08.018	Tartaric acid	133-37-9	621	18				JECFA
08.019	Pyruvic acid	127-17-3	936	19				EFSA
08.021	Benzoic acid	65-85-0	850	21				EFSA
08.022	Cinnamic acid	621-82-9	657	22				EFSA
08.023	4-Oxovaleric acid	123-76-2	606	23				JECFA
08.024	Succinic acid	110-15-6		24				CoE
08.025	Fumaric acid	110-17-8	618	25				JECFA
08.026	Adipic acid	124-04-9	623	26				JECFA
08.028	Heptanoic acid	111-14-8	96	28				JECFA
08.029	Nonanoic acid	112-05-0	102	29				JECFA
08.031	2-Methylvaleric acid	97-61-0	261	31				JECFA
08.032	3-Phenylpropionic acid	501-52-0	646	32				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
08.033	Prop-1-ene-1,2,3-tricarboxylic acid	499-12-7	627	33				JECFA
08.034	Cyclohexylacetic acid	5292-21-7	965	34				EFSA
08.035	2-Methylhexanoic acid	4536-23-6	265	582				JECFA
08.036	Citronellic acid	502-47-6	1221	616	At least 90%; secondary components 5-8% citronellal, citronellyl, neryl, and geranyl acetate esters and other naturally occurring terpenes			EFSA
08.037	2-Oxoglutaric acid	328-50-7	634	653				JECFA
08.038	Phenylacetic acid	103-82-2	1007	672				EFSA
08.039	Undec-10-enoic acid	112-38-9	331	689				JECFA
08.040	4-Hydroxybenzoic acid	99-96-7	957	693				EFSA
08.041	Octadeca-9,12-dienoic acid	60-33-3	332	694	44-46% linolenic acid; 18-20% linoleic acid; 22-25% stearic and oleic acid; 7-8% palmitic acid			JECFA
08.042	Undecanoic acid	112-37-8	108	696				JECFA
08.043	Vanillic acid	121-34-6	959	697				EFSA
08.044	(2E),4-Dimethylpent-2-enoic acid	21016-46-6	1211	744	At least 92%; secondary component 5-7% 4-methyl-2-methylenevaleric acid.			EFSA
08.045	2-Ethylbutyric acid	88-09-5	257	2001				JECFA
08.046	2-Methylbutyric acid	116-53-0	255	2002				JECFA
08.047	2-Methylheptanoic acid	1188-02-9	1212	2003				EFSA
08.048	Pent-4-enoic acid	591-80-0	314	2004				JECFA
08.049	Phenoxyacetic acid	122-59-8	1026	2005				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
08.050	Hex-3-enoic acid	4219-24-3	317	2256				JECFA
08.051	3-Methyl-2-oxobutyric acid	759-05-7	631	2262				JECFA
08.052	4-Methyl-2-oxovaleric acid	816-66-0	633	2263				JECFA
08.053	Malonic acid	141-82-2		2264				EFSA
08.054	Hex-2(trans)-enoic acid	13419-69-7	1361	11777				EFSA
08.055	2-Methyl-2-pentenoic acid	3142-72-1	1210	11680				EFSA
08.056	3-Methylvaleric acid	105-43-1	262	10149				JECFA
08.057	4-Methylvaleric acid	646-07-1	264	10150				JECFA
08.058	2-Methylpent-3-enoic acid	37674-63-8	347	10147				JECFA
08.059	2-Methylpent-4-enoic acid	1575-74-2	355	10148				JECFA
08.060	Cyclohexanecarboxylic acid	98-89-5	961	11911				EFSA
08.061	5-Methylhexanoic acid	628-46-6	266	10142				JECFA
08.062	4-Methylnonanoic acid	45019-28-1	274	11925				JECFA
08.063	4-Methyloctanoic acid	54947-74-9	271	11926				JECFA
08.064	(2E)-Methylcrotonic acid	80-59-1	1205	10168				EFSA
08.065	Dec-9-enoic acid	14436-32-9	328	10090				JECFA
08.066	2-Oxobutyric acid	600-18-0	589					JECFA
08.067	1,2,5,6-Tetrahydrocuminic acid	71298-42-5	976					EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
08.068	Dec-(5- and 6)-enoic acid	72881-27-7	327					JECFA
08.070	3-Methylcrotonic acid	541-47-9	1204	10138				EFSA
08.071	p-Anisic acid	100-09-4	883	10077				EFSA
08.072	But-2-enoic acid (cis and trans)	3724-65-0		10080				EFSA
08.073	Dec-2-enoic acid	3913-85-7	1372	10087				EFSA
08.074	Dec-3-enoic acid	15469-77-9		10088				EFSA
08.075	Dec-4-enoic acid	26303-90-2	1287	10089				EFSA
08.076	2,4-Dihydroxybenzoic acid	89-86-1	908					EFSA
08.078	2-Ethylhexanoic acid	149-57-5						EFSA
08.079	4-Ethyl octanoic acid	16493-80-4	1218					EFSA
08.080	Gallic acid	149-91-7		10170				EFSA
08.081	Geranic acid	459-80-3	1825	10094				EFSA
08.082	Glutaric acid	110-94-1						EFSA
08.083	Hept-2-enoic acid	18999-28-5		10102				EFSA
08.085	(E,E)-Hexa-2,4-dienoic acid	110-44-1	1176					EFSA
08.086	3-Hydroxy-2-oxopropionic acid	1113-60-6	635					JECFA
08.087	4-Hydroxy-3,5-dimethoxybenzoic acid	530-57-4		10111				EFSA
08.088	4-Hydroxy-3,5-dimethoxycinnamic acid (mixture of isomers)	530-59-6						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
08.089	4-Hydroxy-3-methoxycinnamic acid (mixture of isomers)	1135-24-6		10113				EFSA
08.090	2-Hydroxy-4-methylvaleric acid	498-36-2		10118				EFSA
08.092	3-Methoxybenzoic acid	586-38-9	882					EFSA
08.093	3-Methyl-2-oxovaleric acid	39748-49-7	632	10146				JECFA
08.094	4-Methyldecanoic acid	24323-24-8						EFSA
08.095	8-Methyldecanoic acid	5601-60-5						EFSA
08.096	3-Methylhexanoic acid	3780-58-3						EFSA
08.097	4-Methylhexanoic acid	1561-11-1						EFSA
08.099	4-Methylpent-2-enoic acid	10321-71-8	1818					EFSA
08.100	4-Methylpent-3-enoic acid	504-85-8						EFSA
08.101	Non-2-enoic acid	3760-11-0		10153				EFSA
08.102	Non-3-enoic acid	4124-88-3		10154				EFSA
08.103	Nonanedioic acid	123-99-9		10079				EFSA
08.107	(E)-Pent-2-enoic acid	13991-37-2	1804	10163				EFSA
08.108	2-Phenylpropionic acid	492-37-5		10164				EFSA
08.109	3-Phenylpyruvic acid	156-06-9	1478					EFSA
08.112	Salicylic acid	69-72-7	958	10165				EFSA
08.113	Succinic acid, disodium salt	150-90-3						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
08.114	2-Octenoic acid	1871-67-6	1805	10156				EFSA
08.115	4-Methylheptanoic acid	3302-03-2						EFSA
08.119	2-Hexenoic acid	1191-04-4		11777				EFSA
08.120	2-Methyl-2-butenic acid	13201-46-2		10168				EFSA
08.123	trans-2-Heptenoic acid	10352-88-2	1373					EFSA
08.127	2-(4-Methoxyphenoxy)propionic acid	158833-38-6						EFSA
08.131	cis-2-Heptyl-cyclopropanecarboxylic acid	697290-76-9	1907					EFSA
08.132	3-Hydroxybenzoic acid	99-06-9						EFSA
08.133	3,4-Dihydroxybenzoic acid	99-50-3						EFSA
08.134	4-Hydroxy-3-methoxy-mandelic acid	55-10-7						EFSA
08.135	4-(2,2,3-trimethylcyclopentyl)butanoic acid	957136-80-0						EFSA
09.001	Ethyl acetate	141-78-6	27	191				JECFA
09.002	Propyl acetate	109-60-4	126	192				JECFA
09.003	Isopropyl acetate	108-21-4	305	193				JECFA
09.004	Butyl acetate	123-86-4	127	194				JECFA
09.005	Isobutyl acetate	110-19-0	137	195				JECFA
09.006	Hexyl acetate	142-92-7	128	196				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.007	Octyl acetate	112-14-1	130	197				JECFA
09.008	Nonyl acetate	143-13-5	131	198				JECFA
09.009	Decyl acetate	112-17-4	132	199				JECFA
09.010	Dodecyl acetate	112-66-3	133	200				JECFA
09.011	Geranyl acetate	105-87-3	58	201	At least 90%; secondary components 4-6% geraniol and 1-2% nerol			JECFA
09.012	Citronellyl acetate	150-84-5	57	202	At least 92%; secondary component 4-6% citronellol			JECFA
09.013	Linalyl acetate	115-95-7	359	203				JECFA
09.014	Benzyl acetate	140-11-4	23	204				EFSA
09.015	alpha-Terpinyl acetate	80-26-2	368	205				SCF/CoE
09.016	Menthyl acetate	29066-34-0	431	206				JECFA
09.017	DL-Bornyl acetate	76-49-3	1387	207				EFSA
09.018	Cinnamyl acetate	103-54-8	650	208				EFSA
09.019	p-Anisyl acetate	104-21-2	873	209				EFSA
09.020	Eugenyl acetate	93-28-7	1531	210				EFSA
09.021	Pentyl acetate	628-63-7		211				SCF/CoE
09.022	Heptyl acetate	112-06-1	129	212				JECFA
09.023	Methyl acetate	79-20-9	125	213				JECFA
09.024	Isopentyl acetate	123-92-2	43	214				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.025	2-Ethylbutyl acetate	10031-87-5	140	215				JECFA
09.026	alpha-Pentylcinnamyl acetate	7493-78-9	677	216				EFSA
09.027	Cyclohexyl acetate	622-45-7	1093	217				EFSA
09.028	2-Cyclohexylethyl acetate	21722-83-8	964	218				EFSA
09.029	1,1-Dimethyl-3-phenylpropyl acetate	103-07-1	1460	219				EFSA
09.030	2-Methoxy-4-(prop-1-enyl)phenyl acetate	93-29-8	1262	220				EFSA
09.031	Phenethyl acetate	103-45-7	989	221				EFSA
09.032	3-Phenylpropyl acetate	122-72-5	638	222				EFSA
09.033	Rhodinyl acetate	141-11-7	60	223	At least 87%; secondary component 9-12% rhodinol			JECFA
09.034	Santalyl acetate	1323-00-8	985	224			2	EFSA
09.035	Vanillyl acetate	881-68-5	890	225				EFSA
09.036	p-Tolyl acetate	140-39-6	699	226				EFSA
09.037	Ethyl acrylate	140-88-5	1351	245				EFSA
09.038	Methyl butyrate	623-42-7	149	263				JECFA
09.039	Ethyl butyrate	105-54-4	29	264				JECFA
09.040	Propyl butyrate	105-66-8	150	266				JECFA
09.041	Isopropyl butyrate	638-11-9	307	267				JECFA
09.042	Butyl butyrate	109-21-7	151	268				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.043	Isobutyl butyrate	539-90-2	158	269				JECFA
09.044	Pentyl butyrate	540-18-1	152	270				JECFA
09.045	Hexyl butyrate	2639-63-6	153	271				JECFA
09.046	Octyl butyrate	110-39-4	155	272				JECFA
09.047	Decyl butyrate	5454-09-1	156	273				JECFA
09.048	Geranyl butyrate	106-29-6	66	274	At least 92%; secondary components 3-5% geraniol and 1% nerol			JECFA
09.049	Citronellyl butyrate	141-16-2	65	275	At least 90%; secondary component 6-8% citronellol			JECFA
09.050	Linalyl butyrate	78-36-4	361	276				JECFA
09.051	Benzyl butyrate	103-37-7	843	277				EFSA
09.052	Terpinyl butyrate	2153-28-8	370	278				JECFA
09.053	Cinnamyl butyrate	103-61-7	652	279				EFSA
09.054	Allyl butyrate	2051-78-7	2	280			2	JECFA
09.055	3-Methylbutyl butyrate	106-27-4	45	282				JECFA
09.057	2-Phenylpropyl butyrate	80866-83-7	1469	285				EFSA
09.058	p-Anisyl butyrate	6963-56-0	875	286				EFSA
09.059	Ethyl decanoate	110-38-3	35	309				JECFA
09.060	Ethyl hexanoate	123-66-0	31	310				JECFA
09.061	Propyl hexanoate	626-77-7	161	311				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.062	Isopropyl hexanoate	2311-46-8	308	312				JECFA
09.063	Butyl hexanoate	626-82-4	162	313				JECFA
09.064	Isobutyl hexanoate	105-79-3	166	314				JECFA
09.065	Pentyl hexanoate	540-07-8	163	315				JECFA
09.066	Hexyl hexanoate	6378-65-0	164	316				JECFA
09.067	Geranyl hexanoate	10032-02-7	70	317				JECFA
09.068	Linalyl hexanoate	7779-23-9	364	318				JECFA
09.069	Methyl hexanoate	106-70-7	1871	319				SCF/CoE
09.070	3-Methylbutyl hexanoate	2198-61-0	46	320				JECFA
09.071	3-Phenylpropyl hexanoate	6281-40-9	642	321				EFSA
09.072	Ethyl formate	109-94-4	26	339				JECFA
09.073	Propyl formate	110-74-7	117	340	At least 94%; secondary component 4-6% propyl alcohol			JECFA
09.074	Heptyl formate	112-23-2	121	341	At least 94%; secondary component 1-5% heptanal			JECFA
09.075	Octyl formate	112-32-3	122	342				JECFA
09.076	Geranyl formate	105-86-2	54	343	At least 85%; secondary components 8-10% geraniol and 2-4% nerol			JECFA
09.077	Benzyl formate	104-57-4	841	344				EFSA
09.078	Citronellyl formate	105-85-1	53	345	At least 90%; secondary component 5-10% citronellol			JECFA
09.079	Rhodinyl formate	141-09-3	56	346	At least 85%; secondary component 10-13% rhodinol			JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.080	Linalyl formate	115-99-1	358	347	At least 90%; secondary component 6-8% linalool			JECFA
09.081	alpha-Terpinyl formate	2153-26-6	367	348				JECFA
09.082	DL-Bornyl formate	7492-41-3	1389	349				EFSA
09.083	Phenethyl formate	104-62-1	988	350				EFSA
09.084	3-Phenylpropyl formate	104-64-3	637	351				EFSA
09.085	Cinnamyl formate	104-65-4	649	352				EFSA
09.086	2-Methyl-1-phenyl-2-propyl formate	10058-43-2	1654	353	At least 93%; secondary component 5-7% alpha,alpha-dimethylphenethyl alcohol			EFSA
09.087	p-Anisyl formate	122-91-8	872	354	At least 90%; secondary component 8% anisyl alcohol			EFSA
09.088	Eugenyl formate	10031-96-6	1530	355	At least 94%; secondary component 2-3% eugenol			EFSA
09.089	Isoeugenyl formate	7774-96-1	1261	356				EFSA
09.090	alpha-Pentylcinnamyl formate	7493-79-0	676	357	At least 85%; secondary component 10-12% alpha-amylcinnamyl alcohol			EFSA
09.091	Butyl heptanoate	5454-28-4	169	363				JECFA
09.092	Isobutyl heptanoate	7779-80-8	172	364				JECFA
09.093	Ethyl heptanoate	106-30-9	32	365				JECFA
09.094	Octyl heptanoate	5132-75-2	171	366				JECFA
09.095	Propyl heptanoate	7778-87-2	168	367				JECFA
09.096	Methyl heptanoate	106-73-0	167	368				JECFA
09.097	Allyl heptanoate	142-19-8	4	369			2	JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.098	Pentyl heptanoate	7493-82-5	170	370	At least 93%; secondary component 4-7% n-amyl 2-methylhexanoate			JECFA
09.099	Ethyl dodecanoate	106-33-2	37	375				JECFA
09.100	Butyl dodecanoate	106-18-3	181	376				JECFA
09.101	Methyl dodecanoate	111-82-0	180	377	At least 94%; secondary components 3-6% methyl tetradecanoate; 2-5% methyl decanoate; 1-2% methyl hexadecanoate			JECFA
09.102	p-Tolyl dodecanoate	10024-57-4	704	378	At least 90%; secondary components 3-6% p-tolyl tetradecanoate; 2-5% p-tolyl decanoate; 1-2% p-tolyl hexadecanoate			EFSA
09.103	3-Methylbutyl dodecanoate	6309-51-9	182	379				JECFA
09.104	Ethyl tetradecanoate	124-06-1	38	385				JECFA
09.105	Isopropyl tetradecanoate	110-27-0	311	386				JECFA
09.106	Methyl tetradecanoate	124-10-7	183	387				JECFA
09.107	Ethyl nonanoate	123-29-5	34	388				JECFA
09.108	Methyl nonanoate	1731-84-6	179	389				JECFA
09.109	Allyl nonanoate	7493-72-3	6	390			2	JECFA
09.110	3-Methylbutyl nonanoate	7779-70-6	48	391				JECFA
09.111	Ethyl octanoate	106-32-1	33	392				JECFA
09.112	Pentyl octanoate	638-25-5	174	393				JECFA
09.113	Hexyl octanoate	1117-55-1	175	394				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.114	Octyl octanoate	2306-88-9	177	395				JECFA
09.115	Nonyl octanoate	7786-48-3	178	396				JECFA
09.116	Linalyl octanoate	10024-64-3	365	397	At least 93%; secondary components 2-3% linalool and 2-3% octanoic acid			JECFA
09.117	Methyl octanoate	111-11-5	173	398				JECFA
09.118	Heptyl octanoate	4265-97-8	176	399				JECFA
09.119	Allyl octanoate	4230-97-1	5	400			2	JECFA
09.120	3-Methylbutyl octanoate	2035-99-6	47	401				JECFA
09.121	Ethyl propionate	105-37-3	28	402				JECFA
09.122	Propyl propionate	106-36-5	142	403				JECFA
09.123	Isopropyl propionate	637-78-5	306	404				JECFA
09.124	Butyl propionate	590-01-2	143	405				JECFA
09.125	Isobutyl propionate	540-42-1	148	406				JECFA
09.126	Octyl propionate	142-60-9	145	407				JECFA
09.127	Decyl propionate	5454-19-3	146	408				JECFA
09.128	Geranyl propionate	105-90-8	62	409	At least 92%; secondary components 3-4% geraniol and 1-2% nerol			JECFA
09.129	Citronellyl propionate	141-14-0	61	410	At least 90%; secondary component 5-8% citronellol			JECFA
09.130	Linalyl propionate	144-39-8	360	411	At least 94%; secondary component 2-5% linalool			JECFA
09.131	DL-Isobornyl propionate	2756-56-1	842	412				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.132	Benzyl propionate	122-63-4	651	413				EFSA
09.133	Cinnamyl propionate	103-56-0	651	414				EFSA
09.134	Methyl propionate	554-12-1	141	415				JECFA
09.135	Pentyl propionate	624-54-4		416				SCF/CoE
09.136	3-Methylbutyl propionate	105-68-0	44	417				JECFA
09.137	Phenethyl propionate	122-70-3	990	418				EFSA
09.138	3-Phenylpropyl propionate	122-74-7	639	419				EFSA
09.139	Hexyl propionate	2445-76-3	144	420				JECFA
09.140	Cyclohexyl propionate	6222-35-1	1097	421				EFSA
09.141	Rhodinyl propionate	105-89-5	64	422				JECFA
09.142	Terpinyl propionate	80-27-3	369	423				JECFA
09.143	Carvyl propionate	97-45-0	383	424				JECFA
09.144	1-Phenethyl propionate	120-45-6	802	425				EFSA
09.145	p-Anisyl propionate	7549-33-9	874	426				EFSA
09.146	Allyl undec-10-enoate	7493-76-7	9	441			2	JECFA
09.147	Ethyl valerate	539-82-2	30	465				JECFA
09.148	Butyl valerate	591-68-4	160	466				JECFA
09.149	Pentyl valerate	2173-56-0		467				SCF/CoE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.150	(E)-Geranyl valerate	10402-47-8	1821	468				EFSA
09.151	Citronellyl valerate	7540-53-6	69	469	At least 85%; secondary component 10-12% rhodinol			JECFA
09.152	Benzyl valerate	10361-39-4		470				EFSA
09.153	DL-Bornyl valerate	7549-41-9	1392	471				EFSA
09.154	Menthyl valerate	89-47-4	1852	472				EFSA
09.156	Methyl 2-nonynoate	111-80-8	1356	479				EFSA
09.157	Ethyl 2-nonynoate	10031-92-2	1352	480				EFSA
09.158	Methyl 2-octynoate	111-12-6	1357	481				EFSA
09.159	Pentyl formate	638-49-3	119	497	At least 92%; secondary component 4-8% n-amyl alcohol			JECFA
09.160	Cyclohexyl formate	4351-54-6	1095	498				EFSA
09.161	Hexyl formate	629-33-4	120	499				JECFA
09.162	3-Methylbutyl formate	110-45-2	42	500	At least 92%; secondary component 4-8% isoamyl alcohol			JECFA
09.163	Butyl formate	592-84-7	118	501				JECFA
09.164	Isobutyl formate	542-55-2	124	502	At least 94%; secondary component 4-6% isobutyl alcohol			JECFA
09.165	Isopropyl formate	625-55-8	304	503				JECFA
09.166	Heptyl butyrate	5870-93-9	154	504				JECFA
09.167	Neryl butyrate	999-40-6	67	505				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.168	Phenethyl butyrate	103-52-6	991	506				EFSA
09.169	Neryl propionate	105-91-9	63	509				JECFA
09.171	Cedryl acetate	77-54-3		527				EFSA
09.174	2-Methoxyphenyl acetate	613-70-7	718	552				EFSA
09.176	DL-Isobornyl formate	1200-67-5	1390	565				EFSA
09.178	1-Phenethyl acetate	93-92-5	801	573				EFSA
09.179	1-Phenethyl formate	7775-38-4	800	574				EFSA
09.180	Methyl hexadecanoate	112-39-0		581				EFSA
09.181	Methyl hex-2-enoate	2396-77-2		583				EFSA
09.182	Methyl valerate	624-24-8	159	588				JECFA
09.185	2-Oxopropyl acetate	592-20-1		607				SCF/CoE
09.186	sec-Butan-3-onyl acetate	4906-24-5	406	608				JECFA
09.188	Pentyl decanoate	5933-87-9		611				SCF/CoE
09.189	1-Phenylpropyl butyrate	10031-86-4	823	628				EFSA
09.191	Ethyl hex-3-enoate	2396-83-0	335					JECFA
09.192	Ethyl oleate	111-62-6	345	633				JECFA
09.193	Ethyl hexadecanoate	628-97-7	39	634				JECFA
09.194	Ethyl (E,E)-hexa-2,4-dienoic acid	2396-84-1	1178	635				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.197	Hex-3(cis)-enyl acetate	3681-71-8	134	644				JECFA
09.198	Isopentyl valerate	2050-09-1		648				SCF/CoE
09.200	1-Methyl-3-phenylpropyl acetate	10415-88-0	816	671				EFSA
09.201	Phenethyl valerate	7460-74-4		673				EFSA
09.202	Propyl valerate	141-06-0		679				SCF/CoE
09.204	Ethyl octadeca-9,12-dienoate	544-35-4		711				SCF/CoE
09.205	Ethyl octadeca-9,12,15-trienoate	1191-41-9		712				SCF/CoE
09.208	Butyl oleate	142-77-8		741				SCF/CoE
09.209	Butyl octanoate	589-75-3		742				SCF/CoE
09.210	Ethyl octadecanoate	111-61-5	40	745	At least 89%; secondary components 6-7% ethyl palmitate and ethyl esters of other fatty acid			JECFA
09.211	Glyceryl tributyrat	60-01-5	922	747				EFSA
09.212	Neryl formate	2142-94-1	55	2060	At least 90%, secondary components 4-6% geraniol, 1-3% nerol and formate esters of citronellol, geraniol and rhodinol			JECFA
09.213	Neryl acetate	141-12-8	59	2061				JECFA
09.214	Undec-10-enyl acetate	112-19-6	136	2062				JECFA
09.215	Carvyl acetate	97-42-7	382	2063				JECFA
09.216	Dihydrocarvyl acetate	20777-49-5	379	2064				JECFA
09.218	DL-Isobornyl acetate	125-12-2	1388	2066				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.219	1R,2S,5R-isopulegyl acetate	57576-09-7	756	2067			4	EFSA
09.220	Piperonyl acetate	326-61-4	894	2068				EFSA
09.225	1,3-Nonanediol acetate	1322-17-4	605	2075				JECFA
09.227	1,1-Dimethyl-2-phenethyl acetate	151-05-3	1655	2077				EFSA
09.228	o-Tolyl acetate	533-18-6	698	2078				EFSA
09.230	Cyclohexyl butyrate	1551-44-6	1094	2082				EFSA
09.231	1-Phenethyl butyrate	3460-44-4	803	2083				EFSA
09.232	1,1-Dimethyl-2-phenethyl butyrate	10094-34-5	1656	2084				EFSA
09.233	Allyl propionate	2408-20-0	1	2094				JECFA
09.234	Methyl non-2-enoate	111-79-5	1813	2099				EFSA
09.235	Butyl dec-2-enoate	7492-45-7	1348	2100				EFSA
09.236	Methyl undec-9-enoate	5760-50-9	342	2101				JECFA
09.237	Ethyl undec-10-enoate	692-86-4	343	10634				JECFA
09.238	Butyl undec-10-enoate	109-42-2	344	2103				JECFA
09.239	Methyl 2-undecynoate	10522-18-6	1358	2111				EFSA
09.240	Hex-3(cis)-enyl formate	33467-73-1	123	2153				JECFA
09.244	Allyl hexanoate	123-68-2	3	2181			2	JECFA
09.246	Butyl octadecanoate	123-95-5	184	2189				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.247	Allyl crotonate	20474-93-5		2222			2	EFSA
09.248	Ethyl trans-2-butenoate	623-70-1		2244				EFSA
09.249	1-Methyl-2-phenethyl butyrate	68922-11-2	814	2276				EFSA
09.250	Isobutyl valerate	10588-10-0		2303				SCF/CoE
09.251	Methyl decanoate	110-42-9		2304				SCF/CoE
09.253	2-Isopropyl-5-methylphenyl acetate	528-79-0		2308				EFSA
09.254	3-Octyl acetate	4864-61-3	313	2347				JECFA
09.256	Propyl nonanoate	6513-03-7		2351				SCF/CoE
09.258	D- Glucose pentaacetate	3891-59-6						EFSA
09.260	Ethyl (E,Z)-deca-2,4-dienoate	3025-30-7	1192	10574				EFSA
09.261	2-Phenethyl hexanoate	6290-37-5	995	10882				EFSA
09.262	Phenethyl octanoate	5457-70-5	996	10884				EFSA
09.263	Glyceryl tripropionate	139-45-7	921	10657				EFSA
09.264	sec-Butan-3-onyl butyrate	84642-61-5	407	10525				JECFA
09.265	Ethyl oct-4-enoate	34495-71-1	338	10619				JECFA
09.266	Hexyl (2E)-butenoate	19089-92-0	1807	10688				EFSA
09.267	Methyl hex-3-enoate	2396-78-3	334	10801				JECFA
09.268	Methyl oct-4(cis)-enoate	21063-71-8	337	10834				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.269	Fenchyl acetate	13851-11-1	1399	11769				EFSA
09.270	Hex-3-enyl butyrate	16491-36-4	157	11859				JECFA
09.271	Hex-3-enyl hexanoate	31501-11-8	165	11779				JECFA
09.272	Myrtenyl formate	72928-52-0	983	10858			2	EFSA
09.273	Isobutyl crotonate	589-66-2	1206	10706				EFSA
09.274	Ethyl undecanoate	627-90-7	36	10633				JECFA
09.275	Hept-3(trans)-enyl acetate	1576-77-8	135	10662				JECFA
09.276	Oct-2-enyl acetate	3913-80-2	1367	11906			2	EFSA
09.277	Oct-2(trans)-enyl butyrate	84642-60-4	1368	11907			2	EFSA
09.278	p-Mentha-1,8-dien-7-yl acetate	15111-96-3	975	10742			2	EFSA
09.280	Nonane-1,4-diyl diacetate	67715-81-5	609	11927	At least 92%; secondary component 5-8% monoacetate			JECFA
09.281	Oct-1-en-3-yl acetate	2442-10-6	1836	11716			1	EFSA
09.282	Oct-1-en-3-yl butyrate	16491-54-6	1837				1	EFSA
09.283	(E)-Ethyl dec-2-enoate	7367-88-6	1814	10577				EFSA
09.284	Ethyl dec-4-enoate	76649-16-6	341	10578				JECFA
09.285	Ethyl oct-2(trans)-enoate	7367-82-0	1812	10617				EFSA
09.286	2-Methylbutyl acetate	624-41-9	138	10762				JECFA
09.287	Propyl deca-2,4-dienoate	28316-62-3		10889				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.288	4-(4-Acetoxyphenyl)butan-2-one	3572-06-3	731		At least 93%; secondary component 2-5% ortho-isomer.			EFSA
09.289	alpha-Campholene acetate	36789-59-0	969					EFSA
09.290	Ethyl octa-4,7-dienoate	69925-33-3	339					JECFA
09.291	Hex-3-enyl hex-3-enoate	61444-38-0	336					JECFA
09.292	Hexyl 2-hexenoate	33855-57-1	1810		At least 92%; secondary component 6-8% hexyl trans-3-hexenoate			EFSA
09.294	2-Methylbenzyl acetate	17373-93-2	863		At least 98% (sum of o,m,p-isomers)			EFSA
09.298	Methyl non-3-enoate	13481-87-3	340					JECFA
09.299	Methyl oct-2(trans)-enoate	7367-81-9	1811	11800	At least 90%; secondary component 5-6% methyl trans-3-octenoate			EFSA
09.300	Methyl (E,E)-hexa-2,4-dienoic acid	689-89-4	1177					EFSA
09.301	p-Tolyl octanoate	59558-23-5	703					EFSA
09.302	Myrtenyl acetate	1079-01-2	982	10887			2	EFSA
09.303	Hept-2-enyl isovalerate	253596-70-2	1799	10664			2	EFSA
09.304	sec-Heptyl isovalerate	238757-71-6		10806				EFSA
09.305	beta-Ionyl acetate	22030-19-9	1409	10702	At least 92%; secondary components 2-5% acetic acid and 1-2% beta-ionol		2	EFSA
09.306	2-Methoxycinnamyl acetate (mixture of isomers)	110823-66-0		10752				EFSA
09.307	2-Methylbutyl dodecanoate	93815-53-3		10766				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.312	Allyl hexa-2,4-dienoate	7493-75-6	8	2182			2	JECFA/EFSA
09.313	Benzyl 2-methylbutyrate	56423-40-6		10523				EFSA
09.314	Benzyl crotonate	65416-24-2						EFSA
09.315	Benzyl dodecanoate	140-25-0						EFSA
09.316	Benzyl hexanoate	6938-45-0		10521				EFSA
09.317	Benzyl lactate	2051-96-9						EFSA
09.318	Benzyl octanoate	10276-85-4						EFSA
09.319	DL-Bornyl butyrate	13109-70-1	1412					EFSA
09.321	Butyl 2-methylbut-2(cis)-enoate	7785-64-0						EFSA
09.323	sec-Butyl acetate	105-46-4		10527				EFSA
09.324	Butyl but-(2E)-enoate	591-63-9						EFSA
09.325	sec-Butyl butyrate	819-97-6		10528				EFSA
09.326	Butyl deca-(2E,4Z)-dienoate	28369-24-6		10529				EFSA
09.327	Butyl decanoate	30673-36-0		10530				EFSA
09.328	sec-Butyl formate	589-40-2		10532				EFSA
09.329	Butyl hex-2-enoate	13416-74-5						EFSA
09.330	Butyl hex-(3E)-enoate	118869-62-8						EFSA
09.331	Butyl hexadecanoate	111-06-8						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.332	sec-Butyl hexanoate	820-00-8		10533				EFSA
09.333	sec-Butyl lactate	18449-60-0						EFSA
09.334	Butyl nonanoate	50623-57-9						EFSA
09.335	Butyl oct-2-enoate	57403-32-4		10536				EFSA
09.337	Carvacryl acetate	6380-28-5						EFSA
09.339	Cinnamyl 2-methylcrotonate (mixture of isomers)	61792-12-9						EFSA
09.340	Citronellyl 2-methylbut-2-enoate	24717-85-9	1823					EFSA
09.341	Citronellyl hexanoate	10580-25-3						EFSA
09.342	Cyclogeranyl acetate	69842-11-1						EFSA
09.345	Di-isopentyl succinate	818-04-2		10555				EFSA
09.346	Dibutyl malate	6280-99-5						EFSA
09.347	Dibutyl succinate	141-03-7						EFSA
09.348	Diethyl adipate	141-28-6						EFSA
09.349	Diethyl citrate	32074-56-9						EFSA
09.350	Diethyl fumarate	623-91-6						EFSA
09.351	Diethyl maleate	141-05-9		10551				EFSA
09.352	Diethyl nonanedioate	624-17-9		10549				EFSA
09.353	Diethyl oxalate	95-92-1						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.354	Diethyl pentanedioate	818-38-2						EFSA
09.355	neo-Dihydrocarvyl acetate	56422-50-5		10859				EFSA
09.356	1,1-Dimethylethyl propionate	20487-40-5						EFSA
09.358	3,7-Dimethyloctyl acetate	20780-49-8		10899				EFSA
09.360	Ethyl 2-acetoxypropionate	2985-28-6						EFSA
09.362	Ethyl 2-hydroxy-4-methylbenzoate	60770-00-5						EFSA
09.363	Ethyl 2-methoxybenzoate	7335-26-4						EFSA
09.364	Ethyl 2-phenylpropionate	2510-99-8						EFSA
09.365	Ethyl 3-methylcrotonate	638-10-8		10610				EFSA
09.367	Ethyl 4-hydroxybenzoate	120-47-8						EFSA
09.368	Ethyl 4-methylpent-3-enoate	6849-18-9		10615				EFSA
09.370	Ethyl dec-9-enoate	67233-91-4		10579				EFSA
09.371	Ethyl deca-2,4,7-trienoate	78417-28-4	1193	10576				EFSA
09.372	Ethyl dodec-(2E)-enoate	28290-90-6		10584				EFSA
09.374	Ethyl hept-(2E)-enoate	54340-72-6						EFSA
09.375	Ethyl methacrylate	97-63-2						EFSA
09.377	Ethyl oct-3-enoate	1117-65-3	1632	10618				EFSA
09.379	Ethyl pent-2-enoate	2445-93-4		10623				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.380	Ethyl pentadecanoate	41114-00-5		10622				EFSA
09.381	2-Ethylhexyl acetate	103-09-3						EFSA
09.382	Geranyl 2-methylbutyrate	68705-63-5	1820					EFSA
09.383	Geranyl 2-methylcrotonate	7785-33-3	1822	11829				EFSA
09.385	Hept-2-enyl acetate	16939-73-4	1798	10661			2	EFSA
09.386	sec-Hept-4(cis)-enyl acetate	94088-33-2						EFSA
09.387	Heptyl 2-methylbutyrate	50862-12-9		10668				EFSA
09.388	sec-Heptyl acetate	5921-82-4		10802				EFSA
09.390	Heptyl hexanoate	6976-72-3		10666				EFSA
09.391	sec-Heptyl hexanoate	6624-58-4		10805				EFSA
09.392	Heptyl isovalerate	56423-43-9		10667				EFSA
09.394	E-Hex-2-enyl acetate	2497-18-9	1355	643	At least 90%; secondary component 5-6% (Z)-2-hexenyl acetate		2	EFSA
09.395	E -Hex-2-enyl propionate	53398-80-4	1378	11830			2	EFSA
09.396	Hex-2-enyl butyrate	53398-83-7	1375				2	EFSA
09.397	Hex-2-enyl formate	53398-78-0	1376	11858			2	EFSA
09.398	Hex-(2E)-enyl hexanoate.	53398-86-0	1381		At least 93%; secondary components 2-3% hexanoic acid and 2-3% 2-hexenol		2	EFSA
09.399	(2E)-Hexenyl isovalerate	68698-59-9	1377				2	EFSA
09.400	Hex-2-enyl phenylacetate	68133-78-8					2	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.401	Isopentyl acetoacetate	2308-18-1	598	227				JECFA
09.402	Ethyl acetoacetate	141-97-9	595	240				JECFA
09.403	Butyl acetoacetate	591-60-6	596	241				JECFA
09.404	Isobutyl acetoacetate	7779-75-1	597	242				JECFA
09.405	Geranyl acetoacetate	10032-00-5	599	243				JECFA
09.406	Benzyl 3-oxobutyrate	5396-89-4	848	244				EFSA
09.407	2-Phenethyl 3-methylcrotonate	42078-65-9	998	246				EFSA
09.408	Isobutyl 2-methylbut-2(cis)-enoate	7779-81-9	1213	247				EFSA
09.409	Ethyl 2-methylbutyrate	7452-79-1	206	265				JECFA
09.410	Allyl 2-ethylbutyrate	7493-69-8	11	281			2	JECFA/EFSA
09.411	Allyl cyclohexanebutyrate	7493-65-4	14	283			2	JECFA/EFSA
09.412	Methyl isobutyrate	547-63-7	185	287				JECFA
09.413	Ethyl isobutyrate	97-62-1	186	288				JECFA
09.414	Propyl isobutyrate	644-49-5	187	289				JECFA
09.415	Isopropyl isobutyrate	617-50-5	309	290				JECFA
09.416	Butyl isobutyrate	97-87-0	188	291				JECFA
09.417	Isobutyl isobutyrate	97-85-8	194	292				JECFA
09.418	Pentyl isobutyrate	2445-72-9		293				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.419	Isopentyl isobutyrate	2050-01-3	49	294				JECFA
09.420	Heptyl isobutyrate	2349-13-5	190	295				JECFA
09.421	Citronellyl isobutyrate	97-89-2	71	296	At least 92%; secondary component 3-5% citronellol			JECFA
09.423	Linalyl isobutyrate	78-35-3	362	298				JECFA
09.424	Neryl isobutyrate	2345-24-6	73	299	At least 92%; secondary components 2-5% nerol and 1-2% geraniol			JECFA
09.425	Terpinyl 2-methylpropionate	7774-65-4	371	300				JECFA
09.426	Benzyl isobutyrate	103-28-6	844	301				EFSA
09.427	Phenethyl isobutyrate	103-48-0	992	302				EFSA
09.428	3-Phenylpropyl isobutyrate	103-58-2	640	303				EFSA
09.429	p-Tolyl isobutyrate	103-93-5	701	304				EFSA
09.430	Piperonyl isobutyrate	5461-08-5	895	305				EFSA
09.431	Geranyl isobutyrate	2345-26-8	72	306				JECFA
09.432	Methyl 4-methylvalerate	2412-80-8	216	322				JECFA
09.433	Ethyl lactate	97-64-3	931	371				EFSA
09.434	Butyl lactate	138-22-7	932	372				EFSA
09.435	Ethyl 4-oxovalerate	539-88-8	607	373				JECFA
09.436	Butyl 4-oxovalerate	2052-15-5	608	374				JECFA
09.439	Diethyl malate	7554-12-3	620	382				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.441	Butyl ethyl malonate	17373-84-1	615	384				JECFA
09.442	Ethyl pyruvate	617-35-6	938	430				EFSA
09.443	Isopentyl pyruvate	7779-72-8	939	431				EFSA
09.444	Diethyl succinate	123-25-1	617	438				JECFA
09.445	Dimethyl succinate	106-65-0	616	439				JECFA
09.446	Diethyl tartrate	87-91-2	622	440				JECFA
09.447	Ethyl isovalerate	108-64-5	196	442				JECFA
09.448	Propyl isovalerate	557-00-6	197	443				JECFA
09.449	Butyl isovalerate	109-19-3	198	444				JECFA
09.450	Isopropyl isovalerate	32665-23-9	310	445				JECFA
09.451	Octyl isovalerate	7786-58-5	200	446				JECFA
09.452	Nonyl isovalerate	7786-47-2	201	447				JECFA
09.453	Geranyl isovalerate	109-20-6	75	448				JECFA
09.454	Linalyl isovalerate	1118-27-0	363	449				JECFA
09.455	Menthyl isovalerate	16409-46-4	432	450				JECFA
09.456	DL-Bornyl isovalerate	76-50-6	1393	451				EFSA
09.457	DL-Isobornyl isovalerate	7779-73-9	1394	452				EFSA
09.458	Benzyl isovalerate	103-38-8	845	453				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.459	Cinnamyl isovalerate	140-27-2	654	454				EFSA
09.460	Citronellyl isovalerate	68922-10-1		455				SCF/CoE
09.461	Terpinyl isovalerate	1142-85-4	372	456				JECFA
09.462	Methyl isovalerate	556-24-1	195	457				JECFA
09.463	3-Methylbutyl 3-methylbutyrate	659-70-1	50	458				JECFA
09.464	Cyclohexyl isovalerate	7774-44-9	1096	459				EFSA
09.465	Rhodinyl isovalerate	7778-96-3	77	460				JECFA
09.466	Phenethyl isovalerate	140-26-1	994	461				EFSA
09.467	3-Phenylpropyl isovalerate	5452-07-3	641	462				EFSA
09.468	alpha-Pentylcinnamyl isovalerate	7493-80-3	678	463				EFSA
09.469	Allyl cyclohexanevalerate	7493-68-7	15	474			2	JECFA/EFSA
09.470	Cinnamyl isobutyrate	103-59-3	653	496				EFSA
09.471	Neryl isovalerate	3915-83-1	76	508				JECFA
09.472	Isobutyl isovalerate	589-59-3	203	568				JECFA
09.473	Octyl isobutyrate	109-15-9	192	593				JECFA
09.474	Dibutyl sebacate	109-43-3	625	622	At least 93%; secondary components 2-4% butyl ester of C14-, C16-, and C18- fatty acids			JECFA
09.475	Diethyl sebacate	110-40-7	624	623				JECFA
09.476	Ethyl 3-phenyl-3-oxopropionate	94-02-0	834	627	At least 88%; secondary component 7-9% ethyl benzoate			EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.478	Hexyl isobutyrate	2349-07-7	189	646				JECFA
09.480	o-Tolyl isobutyrate	36438-54-7	700	681				EFSA
09.481	Diethyl carbonate	105-58-8		710				SCF/CoE
09.482	Allyl cyclohexaneacetate	4728-82-9	12	2070			2	JECFA/EFSA
09.483	Methyl 2-methylbutyrate	868-57-5	205	2085	At least 92%; secondary component 5-7% methyl isovalerate			JECFA
09.484	1,1-Dimethyl-3-phenylpropyl isobutyrate	10031-71-7	1461	2086				EFSA
09.485	2-Phenylpropyl isobutyrate	65813-53-8	1470	2087				EFSA
09.486	1-Phenethyl isobutyrate	7775-39-5	804	2088				EFSA
09.487	2-Phenoxyethyl isobutyrate	103-60-6	1028	2089				EFSA
09.488	Ethyl cyclohexanepropionate	10094-36-7	966	2095				EFSA
09.489	Allyl isovalerate	2835-39-4	7	2098			2	JECFA /EFSA
09.490	Diethyl malonate	105-53-3	614	2106				JECFA
09.491	Butyl-O-butyryllactate	7492-70-8	935	2107				EFSA
09.492	Allyl cyclohexanehexanoate	7493-66-5	16	2180			2	JECFA/EFSA
09.493	Allyl 2-methylcrotonate	7493-71-2	10	2183			2	JECFA/EFSA
09.494	Benzyl 2-methylcrotonate	37526-88-8	846	2184				EFSA
09.495	Ethyl 2-methylcrotonate	5837-78-5	1824	2185				EFSA
09.496	Phenethyl 2-methylcrotonate	55719-85-2	997	2186				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.498	Allyl cyclohexanepropionate	2705-87-5	13	2223			2	JECFA/EFSA
09.499	Pentyl isovalerate	25415-62-7		2224				EFSA
09.501	Ethyl 2-acetyl-3-phenylpropionate	620-79-1	835	2241				EFSA
09.502	Ethyl butyryl lactate	71662-27-6		2242				EFSA
09.505	Hex-3-enyl isovalerate	10032-11-8	202	2344				JECFA
09.506	Hex-3-enyl 2-methylbutyrate	10094-41-4	211	2345				JECFA
09.507	Hexyl 2-methylbutyrate	10032-15-2	208	4132				JECFA
09.508	Benzyl 2,3-dimethylcrotonate	7492-69-5	847	11868				EFSA
09.509	1-Methyl-1-phenethyl isobutyrate	7774-60-9	1657	11828				EFSA
09.510	Ethyl aconitate	1321-30-8	628	11845				JECFA
09.511	Tributyl acetylcitrate	77-90-7	630					JECFA
09.512	Triethyl citrate	77-93-0	629	11762				JECFA
09.513	Isopropyl 2-methylcrotonate	1733-25-1	312	10733				JECFA
09.514	Ethyl 2,4-dioxohexanoate	13246-52-1	603	11903				JECFA
09.515	Geranyl 2-ethylbutyrate	73019-14-4	78	11667				JECFA
09.516	2-Methylbutyl 2-methylbutyrate	2445-78-5	212	10773	At least 90%; secondary component 5-7% 2-methylbutyl 3-methylbutyrate			JECFA
09.517	Methyl citronellate	2270-60-2	354	10781				JECFA
09.518	4-Methylphenyl isovalerate	55066-56-3	702	10545				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.519	Butyl 2-methylbutyrate	15706-73-7	207	10534				JECFA
09.520	Methyl 3-oxo-2-pentyl-1-cyclopentylacetate	24851-98-7		10785				EFSA
09.521	Methyl-3-oxo-2-pent-2-enyl-1-cyclopentylacetate	39924-52-2	1400	10821	Mixture of isomers: trans-trans isomer: 2-8%, trans-cis isomer: 84-92%, cis-cis isomer:3-8%. Sum of three main peaks: 98-100%			EFSA
09.522	Ethyl 3-hydroxybutyrate	5405-41-4	594	10596				JECFA
09.523	Dodecyl isobutyrate	6624-71-1	193	10563				JECFA
09.524	Ethyl 2-methylpent-3-enoate	1617-23-8	350	10612				JECFA
09.525	Maltyl isobutyrate	65416-14-0	1482	10739			2	EFSA
09.526	Ethyl 2-methylvalerate	39255-32-8	214	10616				JECFA
09.527	Ethyl 2-methylpent-4-enoate	53399-81-8	351	10613				JECFA
09.528	trans-3-Heptenyl isobutyrate		191	10663				JECFA
09.529	Hexyl isovalerate	10032-13-0	199	10692				JECFA
09.530	Isopentyl 2-methylbutyrate	27625-35-0	51	10721				JECFA
09.531	2-Methylbutyl isovalerate	2445-77-4	204	10772				JECFA
09.532	Methyl 3-hydroxyhexanoate	21188-58-9	600	10812				JECFA
09.533	Ethyl brassylate	105-95-3	626	10571				JECFA
09.534	Ethyl cyclohexanecarboxylate	3289-28-9	963	11916				EFSA
09.535	Ethyl 3-hydroxyhexanoate	2305-25-1	601	11764				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.536	Methyl cyclohexanecarboxylate	4630-82-4	962	11920				EFSA
09.537	Octyl 2-methylbutyrate	29811-50-5	209	10866				JECFA
09.538	Phenethyl 2-methylbutyrate	24817-51-4	993	10883				EFSA
09.539	Oct-3-yl 2-methylcrotonate	94133-92-3	448					JECFA
09.540	Ethyl 2-methylpenta-3,4-dienoate	60523-21-9	353					EFSA
09.541	Ethyl 3-methylvalerate	5870-68-8	215					JECFA
09.542	Ethyl 3-oxohexanoate	3249-68-1	602					JECFA
09.543	Glyceryl 5-hydroxydecanoate	26446-31-1	923	10648	Mixture of 9-11% glycerol; 24-30% delta-decalactone; 25-34% monoglyceride, 13-21% diglyceride and 6-11% triglyceride			EFSA
09.544	Glyceryl 5-hydroxydodecanoate	26446-32-2	924	10649	Mixture of 5-8% glycerol; 37-47% delta-dodecalactone; 16-28% monoglyceride; 11-19% diglyceride and 3-7% triglyceride			EFSA
09.545	Hex-(3Z)-enyl lactate	61931-81-5	934	10681				EFSA
09.546	Hexyl-2-methylpent-(3 and 4)-enoate	58625-95-9	352					JECFA
09.547	Isopropyl 2-methylbutyrate	66576-71-4	210					JECFA
09.548	Methyl 2-hydroxy-4-methylvalerate	40348-72-9	590					JECFA
09.549	Methyl 2-methylvalerate	2177-77-7	213					JECFA
09.550	Methyl 2-oxo-3-methylvalerate	3682-42-6	591					JECFA
09.551	l-Menthyl lactate	59259-38-0	433					JECFA
09.552	3-Oxodecanoic acid glyceride	91052-69-6	914	10650				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.553	3-Oxododecanoic acid glyceride	91052-70-9	915	10651				EFSA
09.554	3-Oxohexadecanoic acid glyceride	91052-71-0	917	10652				EFSA
09.555	3-Oxohexanoic acid glyceride	91052-72-1	910	10653				EFSA
09.556	3-Oxooctanoic acid glyceride	91052-68-5	911	10654				EFSA
09.557	3-Oxotetradecanoic acid glyceride	91052-73-2	916	10655				EFSA
09.558	Dimethyl malonate	108-59-8		11754				EFSA
09.559	Hex-3(cis)-enyl 2-methylcrotonate	67883-79-8	1277					EFSA
09.560	Hex-3(cis)-enyl anisate	121432-33-5						EFSA
09.561	Hex-3(cis)-enyl anthranilate	65405-76-7	1538	10676				EFSA
09.562	trans-3-Hexenyl formate	56922-80-6					1	EFSA
09.563	Hex-3(cis)-enyl isobutyrate	41519-23-7	1275	11783				EFSA
09.564	Hex-3(cis)-enyl propionate	33467-74-2	1274	10683				EFSA
09.565	(3Z)-Hexenyl 2-oxopropionate	68133-76-6	1846	10684				EFSA
09.566	(3Z)-Hexenyl (E)-but-2-enoate	65405-80-3	1276					EFSA
09.567	Hex-(3Z)-enyl decanoate	85554-69-4						EFSA
09.568	(3Z)-hexenyl (E)-hexenoate	53398-87-1	1279		At least 86%; secondary components 6-7% 3-hexenyl 3-hexenoate and 4-5% 1-hexenyl 2-hexenoate			EFSA
09.569	Hex-(3Z)-enyl octanoate	61444-41-5						EFSA
09.570	(Z)-Hex-3-enyl salicylate	65405-77-8		10685				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.571	(3Z)-hexenyl valerate	35852-46-1	1278	10686				EFSA
09.572	Hex-(4Z)-enyl acetate	42125-17-7						EFSA
09.573	Hexa-2,4-dienyl acetate	1516-17-2	1780	10675			2	EFSA
09.574	Hexadec-1-yl acetate	629-70-9						EFSA
09.575	(3Z)-Hexenyl heptanoate	61444-39-1						EFSA
09.578	Hexyl crotonate	1617-25-0		10688				EFSA
09.579	Hexyl dodecanoate	34316-64-8						EFSA
09.580	Hexyl lactate	20279-51-0						EFSA
09.581	Hexyl salicylate	6259-76-3		10695				EFSA
09.582	Hexyl tetradecanoate	42231-99-2						EFSA
09.583	Hexyl valerate	1117-59-5		10696				EFSA
09.584	Isobornyl isobutyrate	85586-67-0	1863					EFSA
09.585	Isobutyl 2-methylbutyrate	2445-67-2		10710				EFSA
09.586	Isobutyl 2-methylprop-2-enoate	97-86-9						EFSA
09.587	Isobutyl decanoate	30673-38-2		10707				EFSA
09.588	Isobutyl dodecanoate	37811-72-6		10708				EFSA
09.589	Isobutyl hexadecanoate	110-34-9		10715				EFSA
09.590	Isobutyl lactate	585-24-0		10709				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.592	Isobutyl octadecanoate	646-13-9						EFSA
09.593	Isobutyl octanoate	5461-06-3		10714				EFSA
09.594	Isobutyl tetradecanoate	25263-97-2		10712				EFSA
09.596	(Z)-But-2-enoate	10482-55-0						EFSA
09.598	Isopentyl decanoate	2306-91-4						EFSA
09.599	Isopentyl heptanoate	109-25-1		10719				EFSA
09.600	Isopentyl hexadecanoate	81974-61-0		10723				EFSA
09.601	Isopentyl lactate	19329-89-6		10720				EFSA
09.602	Isopentyl tetradecanoate	62488-24-8		10722				EFSA
09.603	Isopropyl crotonate	6284-46-4		10729				EFSA
09.604	Isopropyl decanoate	2311-59-3		10730				EFSA
09.605	Isopropyl dodecanoate	10233-13-3						EFSA
09.606	Isopropyl hexadecanoate	142-91-6		10732				EFSA
09.608	Isopropyl octanoate	5458-59-3		10731				EFSA
09.609	Isopropyl valerate	18362-97-5						EFSA
09.611	4-Isopropylbenzyl acetate	59230-57-8						EFSA
09.612	Lavandulyl acetate	25905-14-0						EFSA
09.614	Linalyl valerate	10471-96-2		10738				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.615	p-Menth-1-en-9-yl acetate	28839-13-6	972	10748				EFSA
09.616	mono-Menth-3-yl succinate	77341-67-4	447					JECFA
09.617	p-Menthan-8-yl acetate	58985-18-5						EFSA
09.618	Menthyl formate	2230-90-2		10751				EFSA
09.619	(1R,2S,5R)-Menthyl hexanoate	6070-16-2						EFSA
09.620	Menthyl phenylacetate	1154-92-3						EFSA
09.621	(1R,2S,5R)-Menthyl salicylate	89-46-3						EFSA
09.623	Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	4707-47-5						EFSA
09.624	Methyl 2-methylcrotonate	6622-76-0						EFSA
09.625	Methyl 2-methylpent-3(E)-enoate	33603-30-4						EFSA
09.626	Methyl 2-oxopropionate	600-22-6		10848				EFSA
09.629	Methyl 3-acetoxyhexanoate	21188-60-3		10755				EFSA
09.631	Methyl 4-methylbenzoate	99-75-2						EFSA
09.632	Methyl 5-acetoxyhexanoate	35234-22-1	1719	10756				EFSA
09.633	Methyl 5-hydroxydecanoate	101853-47-8						EFSA
09.634	Methyl acetoacetate	105-45-3						EFSA
09.636	Methyl crotonate	623-43-8						EFSA
09.637	Methyl dec-2-enoate	2482-39-5		11799				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.638	Methyl dec-(4Z)-enoate	7367-83-1		10784				EFSA
09.639	Methyl (E,Z)-deca-2,4-dienoate	4493-42-9	1191		At least 93%; secondary component 2-5% (E,E) methyl 2,4-decadienoate			EFSA
09.640	Methyl deca-4,8-dienoate	1191-03-3		10782				EFSA
09.641	Methyl dodec-(2E)-enoate	6208-91-9		10792				EFSA
09.642	Methyl formate	107-31-3		10795				EFSA
09.643	Methyl geranate	1189-09-9		10797				EFSA
09.644	(S)-Methyl lactate	27871-49-4						EFSA
09.645	Mixture of methyl linoleate and methyl linolenate		346	713, 714	44-46% methyl linolenate; 18-20% methyl linoleate; 22-25% methyl stearate and methyl oleate; 7-8% methyl palmitate			SCF/CoE/ JECFA
09.647	Methyl methacrylate	80-62-6	1834					EFSA
09.648	Methyl N,N-dimethylantranilate	10072-05-6	1551					EFSA
09.649	Methyl N-acetylantranilate	2719-08-6	1550					EFSA
09.650	Methyl N-formylantranilate	41270-80-8	1549					EFSA
09.651	Methyl octadecanoate	112-61-8		10849				EFSA
09.652	Methyl oleate	112-62-9		10836				EFSA
09.655	3-Methylbut-3-enyl acetate	5205-07-2	1269					EFSA
09.656	3-Methylbut-3-enyl benzoate	5205-12-9						EFSA
09.657	1-Methylbutyl acetate	626-38-0	1146	10761				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.658	1-Methylbutyl butyrate	60415-61-4	1142	10763				EFSA
09.659	2-Methylbutyl butyrate	51115-64-1						EFSA
09.660	2-Methylbutyl decanoate	68067-33-4		10765				EFSA
09.661	2-Methylbutyl formate	35073-27-9						EFSA
09.662	2-Methylbutyl hexanoate	2601-13-0		10768				EFSA
09.663	2-Methylbutyl isobutyrate	2445-69-4		10770				EFSA
09.664	2-Methylbutyl octanoate	67121-39-5		10776				EFSA
09.665	2-Methylbutyl propionate	2438-20-2		10778				EFSA
09.666	2-Methylbutyl tetradecanoate	93805-23-3		10774				EFSA
09.670	Myrtanyl acetate	29021-36-1						EFSA
09.671	(3S,6Z)-Nerolidyl acetate	56001-43-5		10862				EFSA
09.672	Non-(3Z)-enyl acetate	13049-88-2						EFSA
09.673	Non-(6Z)-enyl acetate	76238-22-7						EFSA
09.674	(E,Z)-3,6-Nonadien-1-ol, acetate	211323-05-6	1285					EFSA
09.676	sec-Octyl acetate	2051-50-5		10799				EFSA
09.677	Octyl hexanoate	4887-30-3		10865				EFSA
09.678	Pent-2-enyl hexanoate	74298-89-8	1795				2	EFSA
09.679	Pentyl 2-methylbutyrate	68039-26-9		10875				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.680	Pentyl 2-methylisocrotonate	7785-63-9						EFSA
09.681	Pentyl dodecanoate	5350-03-8						EFSA
09.682	Pentyl hexadecanoate	31148-31-9						EFSA
09.683	Pentyl lactate	6382-06-5						EFSA
09.684	(E)-2-Phenylethyl 2-butenolate	68141-20-8		10880				EFSA
09.685	2-Phenethyl decanoate	61810-55-7		10881				EFSA
09.686	Phenethyl lactate	155449-46-0						EFSA
09.687	2-Phenoxyethyl butyrate	23511-70-8						EFSA
09.688	Phenyl acetate	122-79-2	734	10878				EFSA
09.689	Phenyl salicylate	118-55-8	736	11814				EFSA
09.690	3-Phenylpropyl butyrate	7402-29-1						EFSA
09.691	Phytyl acetate	10236-16-5	1833					EFSA
09.692	Prenyl acetate	1191-16-8	1827	11796				EFSA
09.693	Prenyl benzoate	5205-11-8						EFSA
09.694	Prenyl formate	68480-28-4	1826					EFSA
09.695	Prenyl isobutyrate	76649-23-5	1828					EFSA
09.696	Prenyl salicylate	68555-58-8						EFSA
09.698	Propyl 2-methylbutyrate	37064-20-3		10891				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.699	Propyl crotonate	10352-87-1						EFSA
09.700	Propyl decanoate	30673-60-0						EFSA
09.701	Allyl phenoxyacetate	7493-74-5	18	228			2	JECFA/EFSA
09.702	Propyl phenylacetate	4606-15-9	1010	229				EFSA
09.703	Octyl phenylacetate	122-45-2	1017	230				EFSA
09.704	(2E)-Geranyl phenylacetate	102-22-7	1020	231				EFSA
09.705	Benzyl phenylacetate	102-16-9	849	232				EFSA
09.706	Anisyl phenylacetate	102-17-0	876	233				EFSA
09.707	Phenethyl phenylacetate	102-20-5	999	234				EFSA
09.708	Cinnamyl phenylacetate	7492-65-1	655	235				EFSA
09.709	p-Tolyl phenylacetate	101-94-0	705	236				EFSA
09.710	Isoeugenyl phenylacetate	120-24-1	1263	237				EFSA
09.711	Guaiacyl phenylacetate	4112-89-4	719	238				EFSA
09.712	Santalyl phenylacetate	1323-75-7	1022	239			2	EFSA
09.713	Methyl 4-methoxybenzoate	121-98-2	884	248				EFSA
09.714	Ethyl 4-methoxybenzoate	94-30-4	885	249				EFSA
09.715	Methyl anthranilate	134-20-3	1534	250				EFSA
09.716	Ethyl anthranilate	87-25-2	1535	251				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.717	Butyl anthranilate	7756-96-9	1536	252				EFSA
09.718	Isobutyl anthranilate	7779-77-3	1537	253				EFSA
09.719	Allyl anthranilate	7493-63-2	20	254			2	JECFA/EFSA
09.721	Linalyl anthranilate	7149-26-0	1540	256				EFSA
09.722	Cyclohexyl anthranilate	7779-16-0	1541	257				EFSA
09.723	Phenethyl anthranilate	133-18-6	1543	258				EFSA
09.724	alpha-Terpinyl anthranilate	14481-52-8	1542	259				EFSA
09.725	Methyl benzoate	93-58-3	851	260				EFSA
09.726	Ethyl benzoate	93-89-0	852	261				EFSA
09.727	Benzyl benzoate	120-51-4	24	262				EFSA
09.728	Ethyl 4-phenylbutyrate	10031-93-3	1458	307				EFSA
09.729	Methyl 4-phenylbutyrate	2046-17-5	1464	308				EFSA
09.730	Ethyl cinnamate	103-36-6	659	323				EFSA
09.731	Propyl cinnamate	7778-83-8	660	324				EFSA
09.732	Isopropyl cinnamate	7780-06-5	661	325				EFSA
09.733	Butyl cinnamate	538-65-8	663	326				EFSA
09.734	Isobutyl cinnamate	122-67-8	664	327				EFSA
09.735	Pentyl cinnamate (mixture of isomers)	3487-99-8		328				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.736	Linalyl cinnamate	78-37-5	668	329				EFSA
09.737	(S)-Terpinyl cinnamate	10024-56-3	669	330				EFSA
09.738	Benzyl cinnamate	103-41-3	670	331				EFSA
09.739	Cinnamyl cinnamate	122-69-0	673	332				EFSA
09.740	Methyl cinnamate	103-26-4	658	333				EFSA
09.741	Allyl cinnamate	1866-31-5	19	334			2	JECFA/EFSA
09.742	Isopentyl cinnamate	7779-65-9	665	335				EFSA
09.743	Phenethyl cinnamate	103-53-7	671	336				EFSA
09.744	Cyclohexyl cinnamate	7779-17-1	667	337				EFSA
09.745	3-Phenylpropyl cinnamate	122-68-9	672	338				EFSA
09.746	Methyl 3-phenylpropionate	103-25-3	643	427				EFSA
09.747	Ethyl 3-phenylpropionate	2021-28-5	644	429				EFSA
09.748	Ethyl salicylate	118-61-6	900	432				EFSA
09.749	Methyl salicylate	119-36-8	899	433				EFSA
09.750	Isobutyl salicylate	87-19-4	902	434				EFSA
09.751	Isopentyl salicylate	87-20-7	903	435				EFSA
09.752	Benzyl salicylate	118-58-1	904	436				EFSA
09.753	Phenethyl salicylate	87-22-9	905	437				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.755	Isopentyl benzoate	94-46-2	857	562	65-68% 3-methylbutyl benzoate; 30-35% 2-methylbutyl benzoate; 1-5% n-pentyl benzoate			EFSA
09.756	Isobornyl phenylacetate	94022-06-7		566				EFSA
09.757	Isobutyl benzoate	120-50-3	856	567				EFSA
09.758	Methyl p-tert-butylphenylacetate	3549-23-3	1025	577				EFSA
09.761	Pentyl phenylacetate	5137-52-0		612				EFSA
09.762	Pentyl salicylate	2050-08-0		613				EFSA
09.763	Butyl salicylate	2052-14-4	901	614				EFSA
09.764	Ethyl N-ethylanthranilate	38446-21-8	1547	629				EFSA
09.765	Ethyl N-methylanthranilate	35472-56-1	1546	632				EFSA
09.766	Eugenyl benzoate	531-26-0	1533	636				EFSA
09.767	Geranyl benzoate	94-48-4	860	639				EFSA
09.768	Hexyl benzoate	6789-88-4	854	645				EFSA
09.769	Isobutyl N-methylanthranilate	65505-24-0	1548	649				EFSA
09.770	Isopropyl benzoate	939-48-0	855	652				EFSA
09.771	Linalyl benzoate	126-64-7	859	654				EFSA
09.772	Linalyl phenylacetate	7143-69-3	1019	655				EFSA
09.774	Phenethyl benzoate	94-47-3		667				EFSA
09.776	Propyl benzoate	2315-68-6	853	677				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.779	Butyl benzoate	136-60-7		740				EFSA
09.780	Cinnamyl benzoate	5320-75-2	760	743				EFSA
09.781	Methyl N-methylantranilate	85-91-6	1545	756				EFSA
09.782	Heptyl cinnamate	10032-08-3	666	2104				EFSA
09.783	Methyl phenylacetate	101-41-7	1008	2155				EFSA
09.784	Ethyl phenylacetate	101-97-3	1009	2156				EFSA
09.785	Citronellyl phenylacetate	139-70-8	1021	2157				EFSA
09.786	Isopropyl phenylacetate	4861-85-2	1011	2158				EFSA
09.787	Butyl phenylacetate	122-43-0	1012	2159				EFSA
09.788	Isobutyl phenylacetate	102-13-6	1013	2160				EFSA
09.789	3-Methylbutyl phenylacetate	102-19-2	1014	2161	62-64% n-amyl; 33-36% isoamyl			EFSA
09.790	Allyl phenylacetate	1797-74-6	17	2162			2	JECFA/EFSA
09.791	(3S)-Rhodiny phenylacetate	10486-14-3	1018	2163				EFSA
09.796	Methyl 2-methoxybenzoate	606-45-1	880	2192				EFSA
09.797	Ethyl (p-tolyloxy)acetate	67028-40-4	1027	2243				EFSA
09.798	Ethyl vanillate	617-05-0		2302				EFSA
09.799	Methyl vanillate	3943-74-6		2305				EFSA
09.801	2-Naphthyl anthranilate	63449-68-3	1544	11862				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.802	Ethyl 2-ethyl-3-phenylpropionate	2983-36-0	1475	10587				EFSA
09.803	Propylene glycol dibenzoate	19224-26-1	862	10890				EFSA
09.804	Hexyl phenylacetate	5421-17-0	1015	10694				EFSA
09.805	Hex-3-enyl phenylacetate	42436-07-7	1016	10682				EFSA
09.806	(Z)-Hex-3-enyl benzoate	25152-85-6	858	11778	93-97% cis-hexenyl benzoate; 1-2% trans-3-hexenyl benzoate			EFSA
09.807	o-Tolyl salicylate	617-01-6	907					EFSA
09.808	Guaiyl acetate	134-28-1		10659				EFSA
09.809	p-Mentha-1,8(10)-dien-9-yl acetate	15111-97-4		10743			2	EFSA
09.811	Vanillin isobutyrate	20665-85-4	891					EFSA
09.812	Glyceryl tribenzoate	614-33-5	861	10656				EFSA
09.813	Propyl dodecanoate	3681-78-5						EFSA
09.814	Propyl hexadecanoate	2239-78-3		10893				EFSA
09.815	Propyl lactate	616-09-1						EFSA
09.816	Propyl octanoate	624-13-5		10892				EFSA
09.818	3,7,11-Trimethyldodeca-2,6,10-trienyl acetate	29548-30-9	1831					EFSA
09.819	3,5,5-Trimethylhexyl acetate	58430-94-7						EFSA
09.820	Undecyl acetate	1731-81-3		10906				EFSA
09.821	Vetiveryl acetate	117-98-6	1867	11887			2	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.822	iso-Propenyl acetate	108-22-5	1835					EFSA
09.824	Ethyl 2-acetylbutyrate	607-97-6						EFSA
09.825	Pentyl benzoate	2049-96-9		2307				EFSA
09.829	Ethyl cyclohexyl acetate	5452-75-5		218				EFSA
09.830	Terpineol acetate	8007-35-0	368	205				JECFA
09.831	Ethyl 3,7-dimethyl-2,6-octadienoate	13058-12-3						EFSA
09.832	Ethyl 3-acetohexanoate	21188-61-4		10566				EFSA
09.833	iso-Propyl 4-oxopentanoate	21884-26-4						EFSA
09.835	Benzyl decanoate	42175-41-7						EFSA
09.836	3-Phenylpropyl benzoate	60045-26-3						EFSA
09.837	3-Phenylpropyl 3-phenylpropionate	60045-27-4						EFSA
09.838	(3Z)-Hexenyl methyl carbonate	67633-96-9						EFSA
09.839	Decyl 3-methylbutyrate	72928-48-4						EFSA
09.840	Propyl 2,4-decadienoate	84788-08-9	1194	10889				EFSA
09.841	2-Hexenyl octanoate	85554-72-9	1796				2	EFSA
09.842	l-Menthol ethylene glycol carbonate	156324-78-6	443					JECFA
09.843	Menthol 1-and 2-propylene glycol carbonate	30304-82-6					1	EFSA
09.846	3-Hexenyl formate	2315-09-5	1272	2153				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.848	(-)-bornyl acetate	5655-61-8	1864					EFSA
09.850	Ethyl trans-2-hexenoate	27829-72-7	1808	631				EFSA
09.852	2-Methylbutyl 2-hydroxybenzoate	51115-63-0						EFSA
09.854	cis-3-Hexenyl 2-methylbutanoate	53398-85-9					1	EFSA
09.855	(3E)-Hexenyl hexanoate	56922-82-8						EFSA
09.858	Phenylmethyl 2-methyl-2-butenolate	67674-41-3					1	EFSA
09.862	Ethyl 3-acetoxy octanoate	85554-66-1						EFSA
09.865	Hexyl (9Z)-octadecenoate	20290-84-0						EFSA
09.866	Allyl valerate	6321-45-5					2	EFSA
09.870	Carvyl-3-methylbutyrate	94386-39-7						EFSA
09.871	Citronellyl decanoate	72934-06-6						EFSA
09.872	Citronellyl dodecanoate	72934-07-7						EFSA
09.874	Di(2-methylbutyl) malate	253596-99-5						EFSA
09.878	Eugenyl isovalerate	61114-24-7	1532					EFSA
09.880	Hept-4-enyl-2 butyrate	233666-01-8						EFSA
09.884	Hex-3-enyl-2-ethylbutyrate	233666-04-1						EFSA
09.885	Hex-3-enyl hexadecanoate	233666-03-0						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.888	Isobornyl 2-methylbutyrate	94200-10-9	1869					EFSA
09.893	2-Isopropyl-5-methylphenyl formate	406700-80-9						EFSA
09.894	2-Methoxy-4-(prop-1-enyl)phenyl 3-methylbutyrate	61114-23-6						EFSA
09.895	4-Methoxybenzyl-2-methylpropionate	71172-26-4						EFSA
09.897	3-Methylbut-3-en-1-yl butyrate	54702-13-5						EFSA
09.898	3-Methylbut-3-en-1-yl hexanoate	53655-22-4						EFSA
09.899	Myrtenyl-2-methylbutyrate	138530-44-6					2	EFSA
09.900	Myrtenyl-3-methylbutyrate	33900-84-4					2	EFSA
09.916	Ethyl 3-hydroxyoctanoate	7367-90-0		10603				EFSA
09.917	4-Pentenyl acetate	1576-85-8	1270					EFSA
09.918	cis-4-Decenyl acetate	67452-27-1	1288					EFSA
09.919	Ethyl 3-acetoxy-2-methylbutyrate	139564-43-5	1718					EFSA
09.921	Ethyl 5-hexenoate	54653-25-7	1273					EFSA
09.922	(4Z)-Ethylheptenoate	39924-27-1	1281					EFSA
09.923	Hept-2-yl butyrate	39026-94-3	1144					EFSA
09.924	3-Heptyl acetate (mixture of R and S)	5921-83-5	1143					EFSA
09.925	Nonan-3-yl acetate	60826-15-5	1145					EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.926	Octan-3-yl formate	84434-65-1						EFSA
09.927	Rhodinyl butyrate	141-15-1	68		At least 85%; secondary component 10-13% rhodinol			JECFA
09.928	(3E)-Hexenyl acetate	3681-82-1						EFSA
09.929	L-Monomenthyl glutarate	220621-22-7						EFSA
09.930	Cyclohexyl, 2-methylene-5-(1-methylethenyl) acetate	71660-03-2	1098					EFSA
09.931	2,6-Dimethyl-2,5,7-octatriene-1-ol acetate	999999-91-4	1226				2	EFSA
09.932	(5Z)-Octenylpropionate	196109-18-9	1282		At least 93%; secondary components 2-3% (E)-5-Octenyl propionate and 0.5-1% (Z)-5-Octenol			EFSA
09.933	Ethyl vanillin isobutyrate	188417-26-7	953					EFSA
09.934	Methyl (5Z)-Octenoate	41654-15-3	1630					EFSA
09.935	Dimethyl glutarate	406179-71-3						EFSA
09.936	4,8-Dimethyl-3,7-nonadien-2-yl acetate	91418-25-6	1847				1	EFSA
09.937	Methyl (3Z)-hexenoate	13894-62-7	1624					EFSA
09.938	6-Methyl-5-hepten-2-yl acetate	19162-00-6	1838					EFSA
09.939	Ethyl (3Z)-hexenoate	64187-83-3	1626					EFSA
09.940	Rhodinyl isobutyrate	138-23-8	74	592				JECFA
09.942	2-Methylbutyl-3-methyl-2-butenate	97890-13-6						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
09.943	Guaiacol propionate	7598-60-9						EFSA
09.944	Guaiacol butyrate	4112-92-9						EFSA
09.945	Guaiacol isobutyrate	723759-62-4						EFSA
09.946	Dihydrogalangal acetate	129319-15-9						EFSA
09.947	(E,Z)-2,6-nonadienyl acetate	68555-65-7	1188				2	JECFA/EFSA
09.948	(2E)-2-nonenyl acetate	30418-89-4					2	EFSA
09.949	L-Menthyl (S)-3-hydroxybutyrate	115869-76-6						EFSA
09.950	Z-5-Octenyl acetate	71978-00-2						EFSA
09.951	Bis(2-ethylhexyl)adipate (dioctyl adipate)	123-79-5	1968					EFSA
10.001	Nonano-1,4-lactone	104-61-0	229	178				JECFA
10.002	Undecano-1,4-lactone	104-67-6	233	179				JECFA
10.003	Hexadec-6-eno-1,16-lactone	7779-50-2	240	180				JECFA
10.004	Pentadecano-1,15-lactone	106-02-5	239	181				JECFA
10.005	3-Propylidene-phthalide	17369-59-4	1168	494				EFSA
10.006	Butyro-1,4-lactone	96-48-0	219	615				JECFA
10.007	Decano-1,5-lactone	705-86-2	232	621				JECFA
10.008	Dodecano-1,5-lactone	713-95-1	236	624				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
10.009	Dodec-6-eno-1,4-lactone	18679-18-0	249	625				JECFA
10.010	Hexano-1,5-lactone	823-22-3	224	641				JECFA
10.011	Undecano-1,5-lactone	710-04-3	234	688				JECFA
10.012	5-Methylfuran-2(3H)-one	591-12-8	221	731				JECFA
10.013	Pentano-1,4-lactone	108-29-2	220	757				JECFA
10.014	Nonano-1,5-lactone	3301-94-8	230	2194				JECFA
10.015	Octano-1,5-lactone	698-76-0	228	2195				JECFA
10.016	Tetradecano-1,5-lactone	2721-22-4	238	2196				JECFA
10.017	Decano-1,4-lactone	706-14-9	231	2230				JECFA
10.018	4-Butyloctano-1,4-lactone	7774-47-2	227	2231				JECFA
10.019	Dodecano-1,4-lactone	2305-05-7	235	2240				JECFA
10.020	Heptano-1,4-lactone	105-21-5	225	2253				JECFA
10.021	Hexano-1,4-lactone	695-06-7	223	2254				JECFA
10.022	Octano-1,4-lactone	104-50-7	226	2274				JECFA
10.023	5-Ethyl-3-hydroxy-4-methylfuran-2(5H)-one	698-10-2	222	2300			2	JECFA/EFSA
10.024	3-Butylidene-phthalide	551-08-6	1170	10083				EFSA
10.025	3-Butylphthalide	6066-49-5	1169	10084				EFSA
10.026	3-Heptyldihydro-5-methyl-2(3H)-furanone	40923-64-6	244	10953				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
10.027	3,7-Dimethyloctano-1,6-lactone	499-54-7	237	11833	At least 90%; secondary component 5-6% 6-hydroxy-3,7-dimethyl-2-octenoic acid lactone			JECFA
10.028	Dodecano-1,6-lactone	16429-21-3	242					JECFA
10.029	Decano-1,6-lactone	5579-78-2	241					JECFA
10.030	3-Hydroxy-4,5-dimethylfuran-2(5H)-one	28664-35-9	243	11834			2	JECFA/EFSA
10.031	6-Pentyl-2H-pyran-2-one	27593-23-3	245	10967				EFSA
10.033	Dec-7-eno-1,5-lactone	34686-71-0	247					JECFA
10.034	5,6-Dihydro-3,6-dimethylbenzofuran-2(4H)-one	80417-97-6	1163				2	EFSA
10.035	Undec-8-eno-1,5-lactone	68959-28-4	248					JECFA
10.036	5,6,7,7a-Tetrahydro-3,6-dimethylbenzofuran-2(4H)-one	13341-72-5	1162				2	EFSA
10.037	5-Hydroxy-2-decenoic acid delta-lactone	54814-64-1	246					EFSA
10.038	Dec-7-eno-1,4-lactone	67114-38-9						EFSA
10.039	cis-Dec-7-eno-1,4-lactone	63095-33-0						EFSA
10.040	Dec-8-eno-1,5-lactone	32764-98-0						EFSA
10.042	3,4-Dimethyl-5-pentylidene-furan-2(5H)-one	774-64-1		11873	At least 93%; secondary component 1-2% 3,4-dimethyl 5-ketobutanoic acid gamma-lactone		2	EFSA
10.043	2,7-Dimethylocta-5(trans),7-dieno-1,4-lactone	78548-56-8					2	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
10.044	Dodec-2-eno-1,5-lactone	16400-72-9	438		At least 88% 6-heptyl-5,6-dihydro-2H-pyran-2-one; secondary components 3-5% E-6-(3-heptenyl)-5,6-dihydro-2H-pyran-2-one and 1-2% 6-heptyl-3,6-dihydro-2H-pyran-2-one			EFSA
10.045	Heptano-1,5-lactone	3301-90-4		10660				EFSA
10.046	Hex-2-eno-1,4-lactone	2407-43-4					2	EFSA
10.047	Hexadecano-1,16-lactone	109-29-5						EFSA
10.048	Hexadecano-1,4-lactone	730-46-1		10673				EFSA
10.049	Hexadecano-1,5-lactone	7370-44-7		10674				EFSA
10.050	Hexahydro-3,6-dimethyl-2(3H)-benzofuranone	92015-65-1	1161					EFSA
10.051	5-Hexyl-5-methyldihydrofuran-2(3H)-one	7011-83-8	250					JECFA
10.052	3-Methylnonano-1,4-lactone	33673-62-0						EFSA
10.053	3-Methyloctano-1,4-lactone	39212-23-2	437	10535				JECFA
10.054	Non-2-eno-1,4-lactone	21963-26-8					2	EFSA
10.055	Pentano-1,5-lactone	542-28-9		10907				EFSA
10.056	Phthalide	87-41-2						EFSA
10.057	3a,4,5,7a-Tetrahydro-3,6-dimethylbenzofuran-2(3H)-one	57743-63-2					2	EFSA
10.058	Tridecano-1,5-lactone	7370-92-5		10902				EFSA
10.059	Hexadec-7-en-1,16-lactone	123-69-3						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
10.060	2-Decen-1,4-lactone	2518-53-8					2	EFSA
10.061	cis-5-Hexenyldihydro-5-methylfuran-2(3H)-one	70851-61-5	1159					EFSA
10.063	Hexadec-9-en-1,16 lactone	28645-51-4	1991					EFSA
10.066	Furan-2(5H)-one						2	EFSA
10.068	Pentadecano-1,14-lactone	32539-85-8						EFSA
10.069	3-Methyl gamma-decalactone	67663-01-8	1158		At least 94% (sum of cis and trans isomers); secondary component 1-2% heptan-1-ol			EFSA
10.070	4-Methyl-5-hexen-1,4-olide	1073-11-6	1157					EFSA
10.072	Dimethyl-3,6-benzo-2(3H)-furanone	65817-24-5	1167					EFSA
10.168	5,6-Dimethyl-tetrahydro-pyran-2-one	10413-18-0						EFSA
10.169	5,6,7,7alpha-Tetrahydro-4,4,7alpha-trimethyl-2-(4H)-benzofuranone	15356-74-8	1164		At least 90%; secondary components 3-5 % 2,9-dimethyl 3,8-decanedione, 3-5% 4-hydroxy-5,6-oxo- beta-ionone			EFSA
10.170	5-Pentyl-3H-furan-2-one	51352-68-2	1989		Mixture of 3H- and 5H-isomers (2:1)		2	EFSA
11.001	3-Methylbutylamine	107-85-7	1587	512				EFSA
11.002	Isobutylamine	78-81-9	1583	513				EFSA
11.003	Butylamine	109-73-9	1582	524				EFSA
11.004	Propylamine	107-10-8	1580	601				EFSA
11.005	sec-Butylamine	13952-84-6	1584	707				EFSA
11.006	Phenethylamine	64-04-0	1589	708				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
11.007	2-(4-Hydroxyphenyl)ethylamine	51-67-2	1590	709				EFSA
11.008	2-Aminoacetophenone	551-93-9		2041			4	EFSA
11.009	Trimethylamine	75-50-3	1610	10497				EFSA
11.015	Ethylamine	75-04-7	1579	10477				EFSA
11.016	Hexylamine	111-26-2	1588	10478				EFSA
11.017	N-Isopentylidene isopentylamine	35448-31-8	1606					EFSA
11.018	Isopropylamine	75-31-0	1581	10480				EFSA
11.020	2-Methylbutylamine	96-15-1	1586	10484				EFSA
11.021	Pentylamine	110-58-7	1585	11734				EFSA
11.023	Triethylamine	121-44-8	1611	10496				EFSA
11.025	Trimethylamine oxide	1184-78-7	1614	10494				EFSA
11.026	Tripopylamine	102-69-2	1612	10495				EFSA
12.001	3-(Methylthio)propionaldehyde	3268-49-3	466	125				JECFA
12.002	Methyl 3-(methylthio)propionate	13532-18-8	472	428				JECFA
12.003	Methanethiol	74-93-1	508	475				JECFA
12.004	Allylthiol	870-23-5	521	476	At least 75%; secondary components 20-25% allyl disulfide and 5-7% allylsulfide			JECFA
12.005	Phenylmethanethiol	100-53-8	526	477				JECFA
12.006	Dimethyl sulfide	75-18-3	452	483				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.007	Dibutyl sulfide	544-40-1	455	484				JECFA
12.008	Diallyl disulfide	2179-57-9	572	485	At least 80%; secondary components 10-15% allyl sulfide and 5-7% allyl mercaptan			JECFA
12.009	Diallyl trisulfide	2050-87-5	587	486	At least 65%; secondary components 20-25% allyl disulfide, 5-7% allylsulfide and 5-7% allyl tetrasulfide		4	JECFA
12.010	Butane-1-thiol	109-79-5	511	526				JECFA
12.012	Diethyl disulfide	110-81-6	1699	533				EFSA
12.013	Dimethyl trisulfide	3658-80-8	582	539			4	JECFA
12.014	Dipropyl disulfide	629-19-6	566	540				JECFA
12.015	Dipropyl sulfide	111-47-7		541				SCF/CoE
12.016	Di-isopropyl sulfide	625-80-9		542				SCF/CoE
12.017	Ethanethiol	75-08-1	1659	546				EFSA
12.018	S-Ethyl acetothioate	625-60-5	483	11665				JECFA
12.019	Methyl propyl disulfide	2179-60-4	565	585				JECFA
12.020	Methyl propyl trisulfide	17619-36-2	584	586	At least 45%; secondary components 25% dipropyl trisulfide, 12% dipropyl disulfide, 14% dimethyl disulfide and 3% methyl propyl sulfide		4	JECFA
12.021	Allyl propyl disulfide	2179-59-1	1700	600				EFSA
12.022	Butane-2,3-dithiol	4532-64-3	539	725				JECFA
12.023	Dipropyl trisulfide	6028-61-1	585	726			4	JECFA
12.024	3-Mercaptobutan-2-ol	37887-04-0	546	760				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.025	Allyl isothiocyanate	57-06-7	1560	2110				EFSA
12.026	Dimethyl disulfide	624-92-0	564	2175				JECFA
12.027	2-Methylbenzene-1-thiol	137-06-4	528	2272				JECFA
12.028	Dicyclohexyl disulfide	2550-40-5	575	2320				JECFA
12.029	Cyclopentanethiol	1679-07-8	516	2321				JECFA
12.030	3-(Methylthio)propyl isothiocyanate	505-79-3	1564	2326				EFSA
12.031	3-Mercaptopentan-2-one	67633-97-0	560	2327				JECFA
12.032	S-Methyl butanethioate	2432-51-1	484	2328				JECFA
12.033	Naphthalene-2-thiol	91-60-1	531	2330				JECFA
12.034	Octane-1,8-dithiol	1191-62-4	541	2331				JECFA
12.035	2-,3- and 10-Mercaptopinane		520	2332	Mixture of isomers (about 54 % of 10-isomer, about 31 % of 2-isomer, about 10 % of 3-isomer)			JECFA
12.036	3-[(2-Mercapto-1-methylpropyl)thio]butan-2-ol	54957-02-7	547	2353				JECFA
12.037	Allyl methyl disulfide	2179-58-0	568	11866	At least 90%; secondary components 3-5% dimethyl sulfide and 3-5% diallyl sulfide			JECFA
12.038	8-Mercapto-p-menthan-3-one	38462-22-5	561	11789			2	JECFA/EFSA
12.039	2-Mercaptopropionic acid	79-42-5	551	11790				JECFA
12.040	2-Methylthioacetaldehyde	23328-62-3	465	11686				JECFA
12.041	1-(Methylthio)butan-2-one	13678-58-5	496	11543				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.042	2-(Methylthio)phenol	1073-29-6	503	11553				JECFA
12.043	Diphenyl disulfide	882-33-7	578	11757				JECFA
12.044	Prop-1-enyl propyl disulfide	5905-46-4	570	11699	At least 92%; secondary component 3-6% dipropyl disulfide			JECFA
12.045	Methyl allyl trisulfide	34135-85-8	586	11867	At least 80%; secondary components 10-12% dimethyl trisulfide and 6-8% allyl trisulfide		4	JECFA
12.046	Ethyl 2-mercaptopropionate	19788-49-9	552	11469				JECFA
12.047	3-Mercaptobutan-2-one	40789-98-8	558	11497				JECFA
12.048	2-Methylbutane-1-thiol	1878-18-8	515	11509				JECFA
12.049	3-Methylbutane-2-thiol	2084-18-6	517	11510				JECFA
12.052	Di-(3-oxobutyl) sulfide	40790-04-3	502	11441				JECFA
12.053	Ethyl 3-(methylthio)propionate	13327-56-5	476	11476				JECFA
12.054	2-(Ethylthio)phenol	4500-58-7	529	11666				JECFA
12.055	4-Mercaptobutan-2-one	34619-12-0	559	11498				JECFA
12.056	3-(Methylthio)butanal	16630-52-7	467	11687				JECFA
12.057	4-(Methylthio)butan-2-one	34047-39-7	497	11688				JECFA
12.058	4-(Methylthio)-4-methylpentan-2-one	23550-40-5	500	11551				JECFA
12.059	Propyl thioacetate	2307-10-0	485	11576				JECFA
12.060	Methyl 4-(methylthio)butyrate	53053-51-3	474	11526				JECFA
12.061	4-(Methylthio)butanal	42919-64-2	468	11542				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.062	3-(Methylthio)propan-1-ol	505-10-2	461	11554				JECFA
12.063	3-(Methylthio)hexan-1-ol	51755-66-9	463	11548				JECFA
12.064	Thioglycerinol	39067-80-6	524	11583				JECFA
12.065	2,8-dithianon-4-en-4-carboxaldehyde	59902-01-1	471	11904			1	EFSA
12.066	Ethane-1,2-dithiol	540-63-6	532	11467				JECFA
12.067	Hexane-1,6-dithiol	1191-43-1	540	11486				JECFA
12.068	Benzyl methyl disulfide	699-10-5	577	11508				JECFA
12.069	Nonane-1,9-dithiol	3489-28-9	542	11558				JECFA
12.070	Propane-1,2-dithiol	814-67-5	536	11564				JECFA
12.071	1-Propane-1-thiol	107-03-9	509	11816				JECFA
12.072	Butane-1,2-dithiol	16128-68-0	537	11909				JECFA
12.073	Butane-1,3-dithiol	24330-52-7	538	11910				JECFA
12.074	Diallyl polysulfides	72869-75-1	588	11912			4	JECFA
12.075	Methyl prop-1-enyl disulfide	5905-47-5	569	11712	At least 90%; secondary components 4-5% methyl 1-dipropyl disulfide and 2-4% propenyl disulfide			JECFA
12.076	Propane-1,3-dithiol	109-80-8	535	11929				JECFA
12.077	Benzyl methyl sulfide	766-92-7	460					EFSA
12.078	4-(Methylthio)butan-1-ol	20582-85-8	462					JECFA
12.079	2-(methylthiomethyl)but-2-enal	40878-72-6	470	11549			1	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.080	Thiophenol	108-98-5	525	11585				JECFA
12.081	Dibenzyl disulfide	150-60-7	579					JECFA
12.082	2,6-(Dimethyl)thiophenol	118-72-9	530					JECFA
12.083	Ethyl 3-mercaptopropionate	5466-06-8	553					JECFA
12.084	Ethyl 4-(methylthio)butyrate	22014-48-8	477					JECFA
12.085	p-Menth-1-ene-8-thiol	71159-90-5	523				2	EFSA
12.086	Methyl 2-(methylthio)butyrate	51534-66-8	486					JECFA
12.087	2-(Methylthiomethyl)-3-phenylpropenal	65887-08-3	505					JECFA
12.088	Diallyl sulfide	592-88-1	458	11846				EFSA
12.089	Ethyl 3-(methylthio)butyrate		480	11475				JECFA
12.096	Allyl methyl sulfide	10152-76-8		11429				EFSA
12.098	Allyl prop-1-enyl disulfide	33368-82-0		11433				EFSA
12.099	Allyl propyl sulfide	27817-67-0		11434				EFSA
12.101	Allyl thiopropionate	41820-22-8	490	11436	At least 83%; secondary component 15-18% diallyl sulfide			JECFA
12.102	Benzyl isothiocyanate	622-78-6	1562	11863				EFSA
12.103	Butane-1,4-dithiol	1191-08-8						EFSA
12.104	Butane-2-thiol	513-53-1						EFSA
12.106	S-2-Butyl 3-methylbutanethioate	2432-91-9						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.107	Butyl isothiocyanate	592-82-5	1561	11488				EFSA
12.108	Di-isopentyl thiomalate	68084-03-7	1672	11454				EFSA
12.109	Di-isopropyl disulfide	4253-89-8	567	11455				JECFA
12.111	Dibutyl disulfide	629-45-8						EFSA
12.113	Diethyl sulfide	352-93-2	454	11450				JECFA
12.114	Diethyl trisulfide	3600-24-6	1701	11451			4	EFSA
12.117	Dipentyl sulfide	872-10-6						EFSA
12.118	2,4-Dithiapentane	1618-26-4	533					JECFA
12.120	2,8-Epithio-p-menthane	68398-18-5	1685				4	EFSA
12.121	Ethyl 2-(methylthio)propionate	23747-43-5	581	11471				JECFA
12.122	Ethyl 2-(methylthio)acetate	4455-13-4	475					JECFA
12.124	Ethyl butyl sulfide	638-46-0						EFSA
12.125	Ethyl propanethioate	2432-42-0						EFSA
12.126	Ethyl propyl disulfide	30453-31-7	1694	11478				EFSA
12.127	Ethyl propyl sulfide	4110-50-3		11479				EFSA
12.128	2-Ethylhexane-1-thiol	7341-17-5	519					JECFA
12.129	3-(Ethylthio)propan-1-ol	18721-61-4						EFSA
12.130	Heptane-1-thiol	1639-09-4	1663	11485				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.132	Hexane-1-thiol	111-31-9	518	11487				JECFA
12.134	S-Isopropyl 3-methylbut-2-enethioate	34365-79-2	1679					EFSA
12.135	3-Mercapto-2-methylpropionic acid	26473-47-2						EFSA
12.136	3-Mercapto-2-oxopropionic acid	2464-23-5						EFSA
12.137	3-Mercapto-3-methylbutan-1-ol	34300-94-2	544				2	EFSA
12.138	3-Mercapto-3-methylbutyl formate	50746-10-6	549				2	EFSA
12.139	2-Mercaptoanisole	7217-59-6	1666	11880				EFSA
12.143	1-Mercaptopropan-2-one	24653-75-6	557					JECFA
12.145	4-Methoxy-2-methylbutane-2-thiol	94087-83-9	548				2	EFSA
12.146	Methyl (methylthio)acetate	16630-66-3	1691	11525				EFSA
12.148	S-Methyl 4-methylpentanethioate	61122-71-2	488					JECFA
12.149	S-Methyl acetothioate	1534-08-3	482					JECFA
12.150	S-Methyl benzothioate	5925-68-8	504	11505				JECFA
12.151	Methyl butyl disulfide	60779-24-0						EFSA
12.152	Methyl butyl sulfide	628-29-5						EFSA
12.153	Methyl ethyl disulfide	20333-39-5	1693	11470	At least 80%, secondary components 7-8% diethyl sulfide and 8-10% dimethyl sulfide			EFSA
12.154	Methyl ethyl sulfide	624-89-5	453	11474				JECFA
12.155	Methyl ethyl trisulfide	31499-71-5	583				4	JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.156	S-Methyl hexanethioate	20756-86-9	489	11515				JECFA
12.157	S-Methyl isopentanethioate	23747-45-7	487	11506				JECFA
12.158	Methyl 3-methyl-2-butenylsulphide	5897-45-0						EFSA
12.159	Methyl methanethiosulfonate	2949-92-0		11520			3	EFSA
12.161	Methyl phenyl disulfide	14173-25-2	576	11532				JECFA
12.162	Methyl phenyl sulfide	100-68-5	459	11533				EFSA
12.163	Methyl prop-1-enyl sulfide	10152-77-9		11538				EFSA
12.165	S-Methyl propanethioate	5925-75-7	1678					EFSA
12.166	Methyl propyl sulfide	3877-15-4		11541				EFSA
12.168	2-Methyl-2-(methyldithio)propanal	67952-60-7	580					JECFA
12.169	2-Methyl-4-oxopentane-2-thiol	19872-52-7	1293	11500	48% 2-methyl-4-oxopentane-2-thiol and 48-50% 4-methyl-3-penten-2-one.		2	EFSA
12.170	3-Methylbut-2-ene-1-thiol	5287-45-6	522	11511				JECFA
12.171	3-Methylbutane-1-thiol	541-31-1	513					JECFA
12.173	2-Methylpropane-1-thiol	513-44-0	512	11536				JECFA
12.175	Methylsulfinylmethane	67-68-5	507					JECFA
12.176	4-(Methylthio)-2-oxobutyric acid	583-92-6	501					JECFA
12.177	8-(Methylthio)-p-menthan-3-one	32637-94-8						EFSA
12.178	3-(Methylthio)butyric acid	16630-65-2						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.179	2-(Methylthio)ethan-1-ol	5271-38-5	1297	11545				EFSA
12.180	1-(Methylthio)ethane-1-thiol	31331-53-0						EFSA
12.181	1-(Methylthio)pentan-3-one	66735-69-1						EFSA
12.182	2-(Methylthio)propionic acid	58809-73-7						EFSA
12.183	3-(Methylthio)propionic acid	646-01-5						EFSA
12.187	Methylthiomethyl butyrate	74758-93-3	473					JECFA
12.188	Methylthiomethyl hexanoate	74758-91-1	479					JECFA
12.189	S-(Methylthiomethyl) 2-methylpropane-thioate	77974-85-7						EFSA
12.191	Pentane-1-thiol	110-66-7	1662					EFSA
12.192	Pentane-2-thiol	2084-19-7	514					JECFA
12.193	Phenethyl isothiocyanate	2257-09-2	1563	11495				EFSA
12.194	2-Phenylethane-1-thiol	4410-99-5	527	11561				JECFA
12.195	S-Prenyl thioacetate	33049-93-3	491					JECFA
12.196	S-Prenyl thioisobutyrate	53626-94-1						EFSA
12.197	Propane-2-thiol	75-33-2	510	11565				JECFA
12.198	2,3,5-Trithiahexane	42474-44-2	1299					EFSA
12.200	1,1-bis(Ethylthio)-ethane	14252-42-7						EFSA
12.201	8-Acetylthio-p-menthanone-3	94293-57-9	506					JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.203	Methylthio 2-(acetyloxy)propionate	74586-09-7	492					JECFA
12.205	Mercaptoacetaldehyde	4124-63-4						EFSA
12.211	But-1-enyl methyl sulphide		457					JECFA
12.212	Ethyl-5-(methylthio)valerate	233665-98-0	1298					EFSA
12.214	Isobutyl-3-(methylthio)butyrate	127931-21-9	1677					EFSA
12.217	3-Mercaptohexan-1-ol		545					JECFA
12.218	Methyl-3-methyl-1-butenyl disulphide		571					JECFA
12.221	S-Prenyl thioisopentanoate	75631-91-3						EFSA
12.227	Methylthio-2-(propionyloxy)propionate		493					JECFA
12.234	3-Mercaptohexyl acetate	136954-20-6	554		At least 82%; secondary components 8% 3-mercaptohexanol and 10% 3-acetylmercaptohexyl acetate			JECFA
12.235	3-Mercaptohexyl butyrate	136954-21-7	555		At least 90%; secondary component 5-6% 3-mercaptohexanol			JECFA
12.236	3-(Methylthio)hexyl acetate	51755-85-2	481					JECFA
12.237	3-(Methylthio)propyl acetate	16630-55-0	478					JECFA
12.238	3-Mercapto-2-methylpentan-1-ol	227456-27-1	1291					EFSA
12.239	3-Mercapto-2-methylpentanal	227456-28-2	1292					EFSA
12.240	2,4,6-Trithiaheptane	6540-86-9	1684					EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.241	2-Mercapto-2-methylpentan-1-ol	258823-39-1	1290				2	EFSA
12.242	Methylthiomethylmercaptan	29414-47-9	1675					EFSA
12.243	Dimercaptomethane	6725-64-0	1661					EFSA
12.244	1-Methylthio-2-propanone	14109-72-9	495					JECFA
12.250	3-Mercaptohexanal	51755-72-7						EFSA
12.251	3-Mercaptohexyl hexanoate	136954-22-8	556					JECFA
12.252	4-Mercapto-4-methyl-2-pentanol	31539-84-1	1669				2	EFSA
12.253	Amyl methyl disulfide	72437-68-4	1697					EFSA
12.254	Butyl ethyl disulfide	63986-03-8	1698		At least 90%, secondary components 2-3% diethyl disulfide and 5-6% dibutyl disulfide			EFSA
12.255	Ethyl 3-mercaptopbutyrate	156472-94-5	1294					EFSA
12.256	Ethyl propyl trisulfide	31499-70-4	1695				4	EFSA
12.257	Ethyl 4-(acetylthio)butyrate	104228-51-5	1295					EFSA
12.259	1-Mercapto-p-menthan-3-one	29725-66-4	1673		At least 89%, secondary components 8-9% piperitone and 1-2% alpha-terpineol		2	EFSA
12.264	4,2-Thiopentanone	92585-08-5	1670					EFSA
12.265	(E)-2-Methyl-1-methylthio-2-butene	89534-74-7	1683					EFSA
12.266	Methyl-2-mercaptopropionate	53907-46-3						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.267	Propyl-2-mercaptopropionate	19788-50-2	1667					EFSA
12.272	Propyl propanethiosulfonate	1113-13-9	1702				3	EFSA
12.273	3-(Methyl thio)heptanal	51755-70-5	1692		At least 92%; secondary component 2-(E)-heptenal			EFSA
12.274	3,6-Diethyl-1,2,4,5-tetrathiane and 3,5-diethyl-1,2,4-trithiolane mix in vegetable oil triglycerides	54644-28-9, 54717-12-3	1687		0.18% 3,6-diethyl-1,2,4,5-tetrathiane isomer I+ II; 0.05% 3,5-diethyl-1,2,4-trithiolane isomer I; 0.1% 3,5-diethyl-1,2,4-trithiolane isomer II; 99% vegetable oil triglyceride			EFSA
12.275	Allyl thiohexanoate	156420-69-8	1681					EFSA
12.276	(S)-1-Methoxy-3-heptanethiol	400052-49-5	1671					EFSA
12.277	3-(Methylthio)propyl butyrate	16630-60-7						EFSA
12.278	3-Acetyl-mercaptohexyl acetate	136954-25-1						EFSA
12.279	3-Methylthiohexanal	38433-74-8	469					JECFA
12.280	Diisopropyl trisulphide	5943-34-0	1300				4	EFSA
12.282	(S)-Methyl octanethioate	2432-83-9						EFSA
12.283	3-Butenyl isothiocyanate	3386-97-8	1889					EFSA
12.284	bis(1-Mercaptopropyl)sulphide	53897-60-2	1709					EFSA
12.285	3-Methylthio-2-butanone	53475-15-3	1688					EFSA
12.286	4-Methylthio-2-pentanone	143764-28-7	1689					EFSA
12.287	Methyl 3-(methylthio)butanoate	207983-28-6	1690					EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.288	Heptan-2-thiol	628-00-2	1664					EFSA
12.289	1-Phenylethylmercaptan	6263-65-6	1665					EFSA
12.290	Methyl-3-mercaptoputanoate	54051-19-3	1674					EFSA
12.291	3-Mercapto-2-methyl-1-butanol	227456-33-9	1289					EFSA
12.292	Hexyl 3-mercaptoputanoate	796857-79-9	1704					EFSA
12.293	Ethane-1,1-dithiol	69382-62-3	1660		1% solution of ethane-1,1-dithiol, solvent 95% ethanol			EFSA
12.294	Isopentyl methyl disulfide	72437-56-0	1696					EFSA
12.297	3-Mercaptoheptyl acetate	548774-80-7	1708					EFSA
12.298	Di-(1-propenyl)-sulfid (mixture)	65819-74-1, 37981-37-6, 37981-36-5						EFSA
12.299	3-(Methylthio)propyl hexanoate	906079-63-8						EFSA
12.300	1,1-Propanedithiol	88497-17-0						EFSA
12.301	Methyl-2-oxo-propyl disulfide	122861-78-3			At least 90%, secondary components 1-mercaptopropan-2-one (less than 8%), 1,1-disulfanediyldipropan-2-one (less than 5%) and 1,3-dimethyltrisulfane (less than 3%)			EFSA
12.302	2-Butanol, 4-mercapto-3-methyl	33959-27-2						EFSA
12.303	3-Pentanethiol	616-31-9						EFSA
12.304	Ethyl-2-mercapto-2-methyl propanoate	33441-50-8					1	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
12.305	2-Mercapto-4-heptanol	1006684-20-3						EFSA
12.306	3-(Methylthio)-decanal	1256932-15-6						EFSA
13.001	5-Methylfurfural	620-02-0	745	119				EFSA
13.002	Methyl 2-furoate	611-13-2	746	358				EFSA
13.003	Propyl 2-furoate	615-10-1	747	359				EFSA
13.004	Allyl 2-furoate	4208-49-5	21	360			2	EFSA
13.005	Hexyl 2-furoate	39251-86-0	749	361				EFSA
13.006	Phenethyl 2-furoate	7149-32-8	1517	362				EFSA
13.007	2-(3-Phenylpropyl)tetrahydrofuran	3208-40-0	1441	489				EFSA
13.009	3,4-Dihydrocoumarin	119-84-6	1171	535				EFSA
13.010	4-Hydroxy-2,5-dimethylfuran-3(2H)-one	3658-77-3	1446	536			1	EFSA
13.011	(E)-Ethyl furfuracrylate	623-20-1		545				EFSA
13.012	6-Methylcoumarin	92-48-8	1172	579				EFSA
13.015	bis-(2,5-Dimethyl-3-furyl) disulfide	28588-73-0	1067	722				EFSA
13.016	bis-(2-Methyl-3-furyl) disulfide	28588-75-2	1066	723				EFSA
13.017	bis-(2-Methyl-3-furyl) tetrasulfide	28588-76-3	1068	724				EFSA
13.018	Furfural	98-01-1	450	2014				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
13.019	Furfuryl alcohol	98-00-0	451	2023				EFSA
13.020	Tetrahydrofurfuryl alcohol	97-99-4	1443	2029				EFSA
13.021	Isopentyl 4-(2-furan)butyrate	7779-66-0	1516	2080				EFSA
13.022	Ethyl 3(2-furyl)propionate	10031-90-0	1513	2091				EFSA
13.023	Isopentyl 3-(2-furan)propionate	7779-67-1	1515	2092				EFSA
13.024	Isobutyl 3-(2-furyl)propionate	105-01-1	1514	2093				EFSA
13.025	Pentyl 2-furoate	1334-82-3	748	2109				EFSA
13.026	2-Furanmethanethiol	98-02-2	1072	2202				EFSA
13.027	2-Pentyl-5 or 6-keto-1,4-dioxane	65504-96-3	1485	2205				EFSA
13.028	2-Butyl-5 or 6-keto-1,4-dioxane	65504-45-2	1484	2206				EFSA
13.029	2,5-Dimethylfuran	625-86-5	1488	2208			3	EFSA
13.030	2-Methylfuran	534-22-5	1487	2209			3	EFSA
13.031	2-Benzofurancarboxaldehyde	4265-16-1	751	2247				EFSA
13.032	Furfuryl isopropyl sulfide	1883-78-9	1077	2248				EFSA
13.033	S-Furfuryl acetothioate	13678-68-7	1074	2250				EFSA
13.034	3-(2-furyl)acrylaldehyde	623-30-3	1497				1	EFSA
13.037	2-(2-Methylprop-1-enyl)-4-methyltetrahydropyran	16409-43-1	1237	2269				EFSA
13.038	2-Phenyl-3-carbethoxyfuran	50626-02-3	752	2309				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
13.039	2,4,5-Trimethyl-delta-3-oxazoline	22694-96-8	1559	2319				EFSA
13.040	(S)-2,5-dimethyl-3-thiofuroylfuran	65505-16-0	1071	2323				EFSA
13.041	2,5-Dimethyl-3-(isopentylthio)furan	55764-28-8	1070	2324				EFSA
13.042	4,5-Dihydro-2-methylfuran-3(2H)-one	3188-00-9	1448	2338				EFSA
13.043	Furfurylidene-2-butanal	770-27-4	1501	11885			1	EFSA
13.044	4-(2-Furyl)but-3-en-2-one	623-15-4	1511	11838			1	EFSA
13.045	1-(2-Furyl)propan-2-one	6975-60-6	1508	11837			4	EFSA
13.046	3-(2-Furyl)-2-methylprop-2-enal	874-66-8	1498	11878			1	EFSA
13.047	Propyl 3-(2-furyl)acrylate	623-22-3	1518	11842				EFSA
13.048	Tetrahydrofurfuryl butyrate	2217-33-6	1444	11841				EFSA
13.049	Tetrahydrofurfuryl propionate	637-65-0	1445	11843				EFSA
13.050	Difurfuryl disulfide	4437-20-1	1081	11480				EFSA
13.051	S-Furfuryl thioformate	59020-90-5	1073	11770				EFSA
13.052	Furfuryl methyl ether	13679-46-4	1520	10944			4	EFSA
13.053	Methyl furfuryl sulfide	1438-91-1	1076	11482				EFSA
13.054	2-Acetylfuran	1192-62-7	1503				4	EFSA
13.055	2-Methylfuran-3-thiol	28588-74-1	1060	11678				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
13.056	Difurfuryl sulfide	13678-67-6	1080	11438			4	EFSA
13.057	Furfuryl isovalerate	13678-60-9	743	10642				EFSA
13.058	3-(5-Methyl-2-furyl) butanal	31704-80-0	1500	10355			4	EFSA
13.059	2-Pentylfuran	3777-69-3	1491	10966			3	EFSA
13.060	Tetrahydrofurfuryl cinnamate	65505-25-1	1447	11821				EFSA
13.061	Difurfuryl ether	4437-22-3	1522	10930			4	EFSA
13.062	Furfuryl propionate	623-19-8	740	10646				EFSA
13.063	S-Furfuryl propanethioate	59020-85-8	1075	11484				EFSA
13.064	Methyl furfuryl disulfide	57500-00-2	1078	11513				EFSA
13.065	2-Methyl-5-(methylthio)furan	13678-59-6	1062	11550				EFSA
13.066	3-Acetyl-2,5-dimethylfuran	10599-70-9	1506	10921			4	EFSA
13.067	Furfuryl octanoate	39252-03-4	742	10645				EFSA
13.068	Furfuryl valerate	36701-01-6	741	10647				EFSA
13.069	2-Heptylfuran	3777-71-7	1492	10952			3	EFSA
13.070	2-Hexanoylfuran	14360-50-0	1512	11180			4	EFSA
13.071	2,5-Dimethylfuran-3-thiol	55764-23-3	1063	11457				EFSA
13.072	1,5,5,9-Tetramethyl-13-oxatricyclo [8.3.0.0.(4.9)]tridecane	3738-00-9	1240	10514				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
13.073	Octyl 2-furoate	39251-88-2	750	10864				EFSA
13.074	2,3-Dimethylbenzofuran	3782-00-1	1495	11913				EFSA
13.075	2,6-Dimethyl-3-((2-methyl-3-furyl)thio)heptan-4-one	61295-51-0	1086	11915	At least 94%; secondary component at least 1% 2,6-dimethyl-2-[(2-methyl-3-furyl)thio]-4-heptanone			EFSA
13.076	6-Hydroxydihydrotheaspirane	65620-50-0	1648	11917			2	EFSA
13.077	3-((2-Methyl-3-furyl)thio)heptan-4-one	61295-41-8	1085	11922				EFSA
13.078	4-((2-Methyl-3-furyl)thio)nonan-5-one	61295-50-9	1087	11923				EFSA
13.079	Methyl 2-methyl-3-furyl disulfide	65505-17-1	1064	11924				EFSA
13.082	Propyl 2-methyl-3-furyl disulfide	61197-09-9	1065					EFSA
13.083	2-Acetyl-5-methylfuran	1193-79-9	1504	11038			4	EFSA
13.084	2-Ethyl-4-hydroxy-5-methyl-3(2H)-furanone	27538-09-6	1449				1	EFSA
13.085	4-Hydroxy-5-methylfuran-3(2H)-one	19322-27-1	1450	11785			1	EFSA
13.086	4,5-Dihydro-2-methyl-3-thioacetoxy-furan	26486-14-6	1089					EFSA
13.087	6-Acetoxydihydrotheaspirane	57893-27-3	1647				2	EFSA
13.088	3,6-Dihydro-4-methyl-2-(2-methylprop-1-en-1-yl)-2H-pyran	1786-08-9	1235					EFSA
13.089	2,5-Dimethyl-4-methoxyfuran-3(2H)-one	4077-47-8	1451				2	EFSA
13.090	2,2-Dimethyl-5-(1-methylprop-1-enyl)tetrahydrofuran	7416-35-5	1452	10937				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
13.091	4,5-Dimethyl-2-ethyloxazole	53833-30-0	1555					EFSA
13.092	2-Ethylfuran	3208-16-0	1489	11706			3	EFSA
13.093	Ethyl 3-(2-furfurylthio)propionate	94278-27-0	1088					EFSA
13.094	2,6,6-Trimethyl-2-vinyltetrahydropyran	7392-19-0	1236	10976				EFSA
13.095	2,5-Diethyltetrahydrofuran	41239-48-9	1453	11882				EFSA
13.097	Anhydrolinalool oxide (5)	13679-86-2	1455	11944			2	EFSA
13.098	Theaspirane	36431-72-8	1238	10515				EFSA
13.099	4-Acetoxy-2,5-dimethylfuran-3(2H)-one	4166-20-5	1456				1	EFSA
13.101	2-Acetyl-3,5-dimethylfuran	22940-86-9	1505				4	EFSA
13.102	Butyl 2-furoate	583-33-5						EFSA
13.103	2-Butylfuran	4466-24-4	1490	10927			3	EFSA
13.105	2-Butyrylfuran	4208-57-5	1507				4	EFSA
13.106	2-Decylfuran	83469-85-6	1493				3	EFSA
13.108	4,5-Dihydro-3-mercapto-2-methylfuran	26486-13-5						EFSA
13.112	4,5-Dimethyl-2-propyloxazole	53833-32-2	1569	11379				EFSA
13.113	2,5-Dimethyl-3-(methyldithio)furan	61197-06-6						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
13.114	2,5-Dimethyl-3-(methylthio)furan	63359-63-7						EFSA
13.115	2,4-Dimethyl-3-oxazoline	77311-02-5	1558					EFSA
13.116	2,5-Dimethyl-3-thioacetoxyfuran	55764-22-2	1523					EFSA
13.117	2,5-Dimethyl-4-ethoxyfuran-3(2H)-one	65330-49-6					2	EFSA
13.118	2,5-Dimethyl-4-ethyloxazole	30408-61-8	1554					EFSA
13.119	2,5-Dimethylfuran-3(2H)-one	14400-67-0		11066			2	EFSA
13.120	2,5-Dimethyltetrahydrofuran	1003-38-9						EFSA
13.122	Ethyl 2-furoate	614-99-3		10588				EFSA
13.123	Ethyl furfuryl ether	6270-56-0	1521	10940			4	EFSA
13.124	Ethyl furfuryl sulfide	2024-70-6						EFSA
13.125	2-Ethyl-5-methylfuran	1703-52-2		10942			3	EFSA
13.127	Furfuryl 2-methylbutyrate	13678-61-0		10643				EFSA
13.128	Furfuryl acetate	623-17-6	739	2065				EFSA
13.129	Furfuryl but-2(E)-enoate	59020-84-7						EFSA
13.130	Furfuryl butyrate	623-21-2	759	638				EFSA
13.132	Furfuryl hexanoate	39252-02-3						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
13.133	Furfuryl isobutyrate	6270-55-9		10641				EFSA
13.134	1-Furfurylpyrrole	1438-94-4	1310	2317			4	EFSA
13.135	1-(2-Furfurylthio)propanone	58066-86-7						EFSA
13.136	2-Furoic acid	88-14-2		10098				EFSA
13.137	3-(2-Furyl)-2-phenylprop-2-enal	65545-81-5	1502	11928			1	EFSA
13.138	1-(2-Furyl)butan-3-one	699-17-2	1510	11084			4	EFSA
13.139	5-Hydroxymethylfurfuraldehyde	67-47-0		11112				EFSA
13.140	Linalool oxide (5-ring)	1365-19-1	1454	11876				EFSA
13.141	Methyl (2-furfurylthio)acetate	108499-33-8						EFSA
13.142	S-Methyl 2-furanthiocarboxylate	13679-61-3	1083	11547				EFSA
13.143	Methyl 3-(furfurylthio)propionate	94278-26-9						EFSA
13.144	Methyl 5-methylfurfuryl disulfide	78818-78-7						EFSA
13.145	Methyl 5-methylfurfuryl sulfide	13679-60-2		11522				EFSA
13.146	Methyl furfuryl trisulfide	66169-00-4						EFSA
13.148	3-Methyl-2-(3-methylbut-2-enyl)furan	15186-51-3	1494				3	EFSA
13.149	5-Methyl-2-furanmethanethiol	59303-05-8						EFSA
13.150	3-(5-Methyl-2-furyl)prop-2-enal	5555-90-8	1499				1	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
13.151	2-Methyl-3,5 and 6-(furfurylthio)pyrazine	65530-53-2	1082	2287	Mixture of isomers: 70% 2,3-; 29% 2,6;-trace 2,5-			EFSA
13.152	2-Methyl-3-(methylthio)furan	63012-97-5	1061					EFSA
13.153	2-Methyl-3-furyl thioacetate	55764-25-5	1069		At least 92%; secondary component 5-7 % cis- and trans-2-methyl-3-tetrahydrofuranthiol acetate			EFSA
13.154	2-Methyl-4,5-benzo-oxazole	95-21-6	1557					EFSA
13.160	2-Methyltetrahydrofuran-3-thiol	57124-87-5	1090				4	EFSA
13.161	Octahydrocoumarin	4430-31-3	1166					EFSA
13.162	2-Octylfuran	4179-38-8		10965			3	EFSA
13.163	2-Pentanoylfuran	3194-17-0	1509				4	EFSA
13.165	6,7,8,8a-Tetrahydro-2,5,5,8a-tetra-methyl-5H-1-benzopyran	5552-30-7	1239					EFSA
13.166	Tetrahydrofurfuryl acetate	637-64-9	1442	2069				EFSA
13.167	(tetrahydrofuryl)methyl phenylacetate	5421-00-1						EFSA
13.169	Trimethyloxazole	20662-84-4	1553	11424				EFSA
13.170	2S-cis-Tetrahydro-4-methyl-2-(2-methyl-1-propenyl)-2H-pyran	3033-23-6					1	EFSA
13.175	4-Acetyl-2,5-dimethylfuran-3(2H)-one						2	EFSA
13.176	Furanyl butyrate	114099-96-6	1519				1	EFSA
13.178	3-[(2-Furfuryl)dithio]-2-methyl-furan	109537-55-5	1524					EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
13.185	3-[(2-Furfuryl)dithio]-2-butanone	159113-17-4						EFSA
13.189	Linalool oxide(5) acetate	56469-39-7						EFSA
13.190	3-((2-Methyl-3-furyl)thio)-2-butanone	61296-44-1	1525					EFSA
13.193	2,5-Dimethyltetrahydro-3-furanthiol	26486-21-5	1091				4	EFSA
13.194	2,5-Dimethyltetrahydro-3-furyl thio acetate	252736-39-3	1092				4	EFSA
13.195	2-Isobutyl-4,5-dimethyl oxazole	26131-91-9	1556					EFSA
13.196	[(2-furanylmethyl)thio]-2-pentanone	180031-78-1	1084					EFSA
13.197	Furfuryl propyl disulphide	252736-36-0	1079					EFSA
13.198	3,6-Dimethyl-2,3,3a,4,5,7a-hexahydro-benzofuran	70786-44-6						EFSA
13.199	3-[(2-Methyl-3-furyl)thio]-butanal	915971-43-6						EFSA
13.200	5-isopropyl-2,6-diethyl-2-methyltetrahydro-2H-pyran	1120363-98-5						EFSA
14.001	Isoquinoline	119-65-3	1303	487			4	EFSA
14.003	Piperine	94-62-2	1600	492			4	JECFA/EFSA
14.004	3-Methylindole	83-34-1	1304	493				EFSA
14.005	2,3-Diethylpyrazine	15707-24-1	771	534				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
14.006	2-Ethyl-3-methylpyrazine	15707-23-0	768	548				EFSA
14.007	Indole	120-72-9	1301	560				EFSA
14.010	Piperidine	110-89-4	1607	675				EFSA
14.011	Quinine hydrochloride	130-89-2		715		In categories 14.1 and 14.2 – not more than 100 mg/kg In spirit drinks as defined in Regulation (EC) No 110/2008 - not more than 250 mg/kg Individually or in combination with FL 14.152 and/or FL 14.155 expressed as quinine base		EFSA
14.014	5,7-Dihydro-2-methylthieno(3,4-d)pyrimidine	36267-71-7	1566	720				EFSA
14.015	5,6,7,8-Tetrahydroquinoxaline	34413-35-9	952	721				EFSA
14.017	2-Ethyl-5-methylpyrazine	13360-64-0	770	728				EFSA
14.018	2,3,5,6-Tetramethylpyrazine	1124-11-4	780	734				EFSA
14.019	2,3,5-Trimethylpyrazine	14667-55-1	774	735				EFSA
14.020	2,5-Dimethylpyrazine	123-32-0	766	2210				EFSA
14.021	2,6-Dimethylpyrazine	108-50-9	767	2211				EFSA
14.022	Ethylpyrazine	13925-00-3	762	2213				EFSA
14.024	2-Ethyl-3,5-dimethylpyrazine	13925-07-0	776	2245				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
14.025	2,5 or 6-Methoxy-3-methylpyrazine	2847-30-5, 2822-22-6, 2882-21-5	788	2266				EFSA
14.026	2-Isopropyl-5-methylpyrazine	13925-05-8	772	2268				EFSA
14.027	2-Methylpyrazine	109-08-0	761	2270				EFSA
14.028	5-Methylquinoxaline	13708-12-8	798	2271				EFSA
14.029	1-Phenyl-(3 or 5)-propylpyrazole	65504-93-0	1568	2277				EFSA
14.030	2-Pyridine methanethiol	2044-73-7	1308	2279				EFSA
14.031	2-Pyrazinyl ethanethiol	35250-53-4	795	2285				EFSA
14.032	Acetylpyrazine	22047-25-2	784	2286				EFSA
14.034	Pyrazinyl methyl sulfide	21948-70-9	796	2288				EFSA
14.035	2-Methyl-3,5 or 6-methylthiopyrazine	67952-65-2	797	2290	70-90% 2-methylthio-3-methylpyrazine and 10-30% 2-methylthio-5 or 6-methylpyrazine.			EFSA
14.037	6,7-Dihydro-5-methyl-5H-cyclopentapyrazine	23747-48-0	781	2314				EFSA
14.038	2-Acetylpyridine	1122-62-9	1309	2315				EFSA
14.039	3-Acetylpyridine	350-03-8	1316	2316				EFSA
14.041	Pyrrrole	109-97-7	1314	2318			4	JECFA/EFSA
14.042	6-Methylquinoline	91-62-3	1302	2339			4	EFSA
14.043	2-Isobutyl-3-methoxypyrazine	24683-00-9	792	11338				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
14.044	2-Isobutyl-3-methylpyrazine	13925-06-9	773					EFSA
14.045	2-Acetyl-1-ethylpyrrole	39741-41-8	1305	11371			2	EFSA
14.046	2-Acetyl-1-methylpyrrole	932-16-1	1306	11373			2	EFSA
14.047	2-Acetylpyrrole	1072-83-9	1307	11721			2	EFSA
14.049	2-Acetyl-3-ethylpyrazine	32974-92-8	785	11293				EFSA
14.050	2,3-Dimethylpyrazine	5910-89-4	765	11323				EFSA
14.053	Mercaptomethylpyrazine	59021-02-2	794	11502				EFSA
14.054	Methoxypyrazine	3149-28-8	787	11347				EFSA
14.055	2-Acetyl-3,5-dimethylpyrazine	54300-08-2	786	11294				EFSA
14.056	2,3-Diethyl-5-methylpyrazine	18138-04-0	777	11303				EFSA
14.057	2-Isopropyl-3-methoxypyrazine	25773-40-4						EFSA
14.058	2-Isobutylpyridine	6304-24-1	1311	11395				EFSA
14.059	3-Isobutylpyridine	14159-61-6	1312	11396				EFSA
14.060	2-Pentylpyridine	2294-76-0	1313	11412				EFSA
14.061	3-Ethylpyridine	536-78-7	1315	11386				EFSA
14.062	2-(sec-Butyl)-3-methoxypyrazine	24168-70-5	791	11300				EFSA
14.064	Pyrrolidine	123-75-1	1609	10491				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
14.065	2,6-Dimethylpyridine	108-48-5	1317	11381				EFSA
14.066	5-Ethyl-2-methylpyridine	104-90-5	1318	11385				EFSA
14.067	2-Methyl-3-ethoxypyrazine	32737-14-7	793	11921	82% 2-methyl-3-ethoxypyrazine and 15% 2-methyl-5 or 6-ethoxypyrazine			EFSA
14.068	2-Propionylpyrrole	1073-26-3	1319	11942			2	EFSA
14.069	Cyclohexylmethylpyrazine	28217-92-7	783					EFSA
14.070	4-Acetyl-2-methylpyrimidine	67860-38-2	1565					EFSA
14.071	Methyl nicotinate	93-60-7	1320					EFSA
14.072	2-(3-Phenylpropyl)pyridine	2110-18-1	1321					EFSA
14.077	2-Ethyl-(3,5 or 6)-methoxypyrazine (85%) and 2-Methyl-(3,5 or 6)-methoxypyrazine (13%)	2-Et-3-MeO: 25680-58-4, 2-Et-5-MeO: 68039-50-9, 2-Et-6-MeO: 67845-38-9, 2-Me-3-MeO: 2847-30-5, 2-Me-5-MeO: 2882-22-6, 2-Me-6-MeO: 2882-21-5	789	11329				EFSA
14.079	2-Acetyl-1,4,5,6-tetrahydropyridine	27300-27-2					2	EFSA
14.080	2-Acetyl-1-pyrroline	99583-29-6	1604					EFSA
14.081	5-Acetyl-2,3-dimethylpyrazine	54300-10-6						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
14.082	2-Acetyl-3-methylpyrazine	23787-80-6	950	11296				EFSA
14.083	2-Acetyl-5-ethylpyrazine	43108-58-3						EFSA
14.084	2-Acetyl-5-methylpyrazine	22047-27-4		11297				EFSA
14.085	2-Acetyl-5-methylpyrrole	6982-72-5					2	EFSA
14.086	2-Acetyl-6-ethylpyrazine	34413-34-8		11295				EFSA
14.087	2-Acetyl-6-methylpyrazine	22047-26-3		11298				EFSA
14.088	1-Acetylintole	576-15-8						EFSA
14.089	4-Acetylpyridine	1122-54-9						EFSA
14.091	2-Butyl-3-methylpyrazine	15987-00-5						EFSA
14.092	2-Butylpyridine	5058-19-5						EFSA
14.093	3-Butylpyridine	539-32-2						EFSA
14.095	3,5-Diethyl-2-methylpyrazine	18138-05-1	779	11305				EFSA
14.096	2,5-Diethyl-3-methylpyrazine	32736-91-7	778	11304				EFSA
14.097	2,5-Diethylpyrazine	13238-84-1		11306				EFSA
14.098	6,7-Dihydro-2,3-dimethyl-5H-cyclopentapyrazine	38917-63-4	782	11309				EFSA
14.099	6,7-Dihydro-5,7-dimethyl-5H-cyclopentapyrazine	41330-21-6						EFSA
14.100	3,(5- or 6)-Dimethyl-2-ethylpyrazine	55031-15-7	775	727	About 50% 2-ethyl-3,5-dimethylpyrazine; about 50% 2-ethyl-3,6-dimethylpyrazine			EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
14.101	2,5-Dimethyl-3-isopropylpyrazine	40790-20-3		11318				EFSA
14.102	2,5-Dimethyl-6,7-dihydro-5H-cyclopentapyrazine	38917-61-2, 38917-62-3			Mixture of 2,5-dimethyl-6,7-dihydro-5H-cyclopentapyrazine (60-100%) and 3,5-dimethyl-6,7-dihydro-5H-cyclopentapyrazine (up to 40 %).			EFSA
14.103	2,3-Dimethylpyridine	583-61-9						EFSA
14.104	2,4-Dimethylpyridine	108-47-4						EFSA
14.105	3,4-Dimethylpyridine	583-58-4						EFSA
14.106	3,5-Dimethylpyridine	591-22-0		11382				EFSA
14.108	2,3-Dimethylquinoxaline	2379-55-7						EFSA
14.109	2-Ethoxy-3-methylpyrazine	32737-14-7						EFSA
14.110	Ethyl nicotinate	614-18-6						EFSA
14.111	3-Ethyl-2,5-dimethylpyrazine	13360-65-1						EFSA
14.112	2-Ethyl-3-methoxypyrazine	25680-58-4						EFSA
14.113	5-Ethyl-6,7-dihydro-5H-cyclopentapyrazine	52517-53-0						EFSA
14.114	2-Ethyl-6-methylpyrazine	13925-03-6	769	11331	95% (sum of 2,5- and 2,6-isomers); 60-63% 2,5-isomer and 30-35% 2,6-isomer			EFSA
14.115	2-Ethylpyridine	100-71-0		11767				EFSA
14.116	4-Ethylpyridine	536-75-4		11387				EFSA
14.117	2-Hexylpyridine	1129-69-7						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
14.118	2-Hydroxypyridine	142-08-5						EFSA
14.120	Isopropyl nicotinate	553-60-6						EFSA
14.121	2-Isopropyl-(3,5 or 6)-methoxypyrazine	93905-03-4	790	11344				EFSA
14.122	2-Isopropyl-3-methylthiopyrazine	67952-59-4		11342				EFSA
14.123	Isopropylpyrazine	29460-90-0	764	11343				EFSA
14.124	2-Isopropylpyridine	644-98-4		11400				EFSA
14.125	4-Isopropylpyridine	696-30-0						EFSA
14.126	2-Methoxy-3-methylpyrazine	2847-30-5						EFSA
14.127	2-Methoxy-3-propylpyrazine	25680-57-3						EFSA
14.128	2-Methyl-3-methylthiopyrazine	2882-20-4						EFSA
14.129	2-Methyl-3-propylpyrazine	15986-80-8						EFSA
14.131	2-Methylindole	95-20-5						EFSA
14.133	2-Methylpiperidine	109-05-7	1608					EFSA
14.134	2-Methylpyridine	109-06-8		11415				EFSA
14.135	3-Methylpyridine	108-99-6		11801				EFSA
14.136	4-Methylpyridine	108-89-4		11416				EFSA
14.137	1-Methylpyrrolidine	120-94-5						EFSA
14.140	3-Pentylpyridine	1802-20-6						EFSA
14.141	Piperazine	110-85-0	1615					EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
14.142	Propylpyrazine	18138-03-9	763	11362				EFSA
14.143	3-Propylpyridine	4673-31-8		11419				EFSA
14.144	Pyrazine	290-37-9	951	11363				EFSA
14.145	Pyrrrole-2-carbaldehyde	1003-29-8		11393			4	EFSA
14.148	5,6,7,8-Tetrahydro-5-methylquinoxaline	52517-54-1						EFSA
14.150	2,4,6-Trimethylpyridine	108-75-8						EFSA
14.152	Quinine sulphate	804-63-7				In categories 14.1 and 14.2 – not more than 100 mg/kg In spirit drinks as defined in Regulation (EC) No 110/2008 - not more than 250 mg/kg Individually or in combination with FL 14.011 and/or FL 14.155 expressed as quinine base		EFSA
14.155	Quinine monohydrochloride dihydrate	6119-47-7				In categories 14.1 and 14.2 – not more than 100 mg/kg In spirit drinks as defined in Regulation (EC) No 110/2008 - not more than 250 mg/kg Individually or in combination with FL 14.011 and/or FL 14.152 expressed as quinine base		EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
14.161	6,7-Dihydro-2,5-dimethyl-5H-cyclopentapyrazine	38917-61-2		11310				EFSA
14.163	1-Methylpyrrole-2-carboxaldehyde	1192-58-1					4	EFSA
14.164	2-Propylpyridine	622-39-9	1322					EFSA
14.167	1-Pyrroline	5724-81-2	1603					EFSA
14.168	2-Propionyl pyrroline 1% vegetable oil triglycerides	133447-37-7	1605				2	EFSA
14.169	1-Ethyl-2-pyrrolicarboxaldehyde	2167-14-8					4	EFSA
14.170	5-Ethyl-2,3-dimethyl pyrazine	15707-34-3						EFSA
15.001	2-Mercaptothiophene	7774-74-5	1052	478				EFSA
15.002	2-Methyl-5-methoxythiazole	38205-64-0	1057	736				EFSA
15.004	5-Methyl-2-thiophenecarbaldehyde	13679-70-4	1050	2203			2	EFSA
15.005	2,4-Dimethyl-5-vinylthiazole	65505-18-2	1039	2237			2	EFSA
15.006	2,5-Dihydroxy-2,5-dimethyl-1,4-dithiane	55704-78-4	562	2322				JECFA
15.007	Spiro(2,4-dithia-1-methyl-8-oxabicyclo[3.3.0]octane-3,3'-(1'-oxa-2'-methyl)-cyclopentane) and Spiro(2,4-dithia-6-methyl-7-oxabicyclo[3.3.0]octane-3,3'-(1'-oxa-2'-methyl)-cyclopentane)	38325-25-6	1296	2325			1	CoE/ JECFA/EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
15.008	2-Thienyl disulfide	6911-51-9	1053	2333				EFSA
15.009	Trithioacetone	828-26-2	543	2334				JECFA
15.010	2-Acetyl-2-thiazoline	29926-41-8	1759	2335			2	EFSA
15.011	5-Acetyl-2,4-dimethylthiazole	38205-60-6	1055	2336				EFSA
15.012	4,5-Dihydrothiophen-3(2H)-one	1003-04-9	498	2337				JECFA
15.013	2-Isobutylthiazole	18640-74-9	1034	11618				EFSA
15.014	5-(2-Hydroxyethyl)-4-methylthiazole	137-00-8	1031	11621				EFSA
15.015	4-Methyl-5-(2-acetoxyethyl)thiazole	656-53-1	1054	11620				EFSA
15.016	Benzothiazole	95-16-9	1040	11594				EFSA
15.017	4,5-Dimethylthiazole	3581-91-7	1035	11606				EFSA
15.018	4-Methyl-5-vinylthiazole	1759-28-0	1038	11633			2	EFSA
15.019	2,4,5-Trimethylthiazole	13623-11-5	1036	11650				EFSA
15.020	2-Acetylthiazole	24295-03-2	1041	11726				EFSA
15.021	2-Ethoxythiazole	15679-19-3	1056	11611				EFSA
15.022	2-(sec-Butyl)thiazole	18277-27-5	1033	11598				EFSA
15.023	4,5-Dihydro-2-methylthiophene-3(2H)-one	13679-85-1	499	11601				JECFA
15.024	3-Acetyl-2,5-dimethylthiophene	2530-10-1	1051	11603			2	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
15.025	3,5-Dimethyl-1,2,4-trithiolane	23654-92-4	573	11883				JECFA
15.026	2-Isopropyl-4-methylthiazole	15679-13-7	1037					EFSA
15.027	2-Propionylthiazole	43039-98-1	1042					EFSA
15.029	2-(sec-Butyl)-4,5-dimethyl-3-thiazoline	65894-82-8	1059				2	EFSA
15.030	4,5-Dimethyl-2-ethyl-3-thiazoline	76788-46-0	1058				2	EFSA
15.032	4,5-Dimethyl-2-isobutyl-3-thiazoline	65894-83-9	1045				2	EFSA
15.033	2-Ethyl 4-methylthiazole	15679-12-6	1044	11612				EFSA
15.034	2-Methyl-1,3-dithiolane	5616-51-3	534					JECFA
15.035	4-Methylthiazole	693-95-8	1043	11627				EFSA
15.036	3-Methyl-1,2,4-trithiane	43040-01-3	574					JECFA
15.038	2-Acetyl-4-methylthiazole	7533-07-5		11589				EFSA
15.039	2-Acetyl-5-methylthiazole	59303-17-2						EFSA
15.040	2-Acetylthiophene	88-15-3		11728			2	EFSA
15.044	2-Butylthiazole	37645-61-7		11597				EFSA
15.045	2-Butylthiophene	1455-20-5					4	EFSA
15.047	3,5-Di-isobutyl-1,2,4-trithiolane	92900-67-9						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
15.048	3,5-Di-isopropyl-1,2,4-trithiolane	54934-99-5						EFSA
15.049	3,5-Diethyl-1,2,4-trithiolane	54644-28-9	1686					EFSA
15.050	2,5-Diethyl-4-methylthiazole	41981-71-9						EFSA
15.051	2,5-Diethyl-4-propylthiazole	4276-68-0						EFSA
15.052	2,5-Diethylthiazole	15729-76-7						EFSA
15.054	Dihydro-2,4,6-triethyl-1,3,5(4H)-dithiazine	54717-17-8					3	EFSA
15.055	2,4-Dimethyl(4H)pyrrolidino[1,2e]-1,3,5-dithiazine	116505-60-3	1763				3	EFSA
15.056	3,6-Dimethyl-1,2,4,5-tetrathiane	67411-27-2						EFSA
15.057	4,6-Dimethyl-2-(1-methylethyl)dihydro-1,3,5-dithiazine	104691-40-9			At least 44% isopropyl-4,6-dimethyl and 27% 4-isopropyl-2,6-dimethyl; secondary components at least 24% 2,4,6-trimethyldihydro-1,3,5-dithiazine; 6-methyl-2,4-diisopropyl-1,3,5-dithiazine; 4-methyl-2,6-diisopropyl-1,3,5-dithiazine; 2,4,6-triisopropyl-dihydro-1,3,5-dithiazine		3	EFSA
15.058	4,5-Dimethyl-2-ethylthiazole	873-64-3						EFSA
15.060	2,4-Dimethyl-3-thiazoline	60755-05-7					2	EFSA
15.061	2,5-Dimethyl-4-ethylthiazole	32272-57-4						EFSA
15.062	2,4-Dimethylthiazole	541-58-2		11605				EFSA
15.063	2,5-Dimethylthiazole	4175-66-0	1758					EFSA
15.064	2,5-Dimethylthiophene	638-02-8					4	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
15.066	1,4-Dithiane	505-29-3	456					JECFA
15.067	4-Ethyl-2-methylthiazole	32272-48-3						EFSA
15.068	5-Ethyl-2-methylthiazole	19961-52-5						EFSA
15.069	4-Ethyl-5-methylthiazole	52414-91-2						EFSA
15.071	2-Ethylthiazole	15679-09-1						EFSA
15.072	2-Ethylthiophene	872-55-9		11614			4	EFSA
15.074	5-Ethylthiophene-2-carbaldehyde	36880-33-8					2	EFSA
15.076	2-Hexylthiophene	18794-77-9	1764	11616			4	JECFA/EFSA
15.078	2-Isobutyl-4,5-dimethylthiazole	53498-32-1		11617				EFSA
15.079	2-Isobutyldihydro-4,6-dimethyl-1,3,5-dithiazine	101517-87-7			At least 64% 2-isobutyl-4,6-dimethyl and 18% 4-isobutyl-2,6-dimethyl; secondary components at least 13% 2,4,6-trimethyl-1,3,5-dithiazine; 2,4-diisobutyl-6-methyl-1,3,5-dithiazine; 2,6-dimethyl-4-butyldihydro-1,3,5-dithiazine; substituted 1,3,5-thiadiazine		3	EFSA
15.080	2-Isopropyl-4,5-dimethylthiazole	53498-30-9						EFSA
15.081	Lenthionine	292-46-6		11619				EFSA
15.082	3-Mercaptothiophene	7774-73-4						EFSA
15.083	3-Methyl-1,2,4-trithiolane	51647-38-2						EFSA
15.084	5-Methyl-2-pentylthiazole	86290-21-3						EFSA
15.085	4-Methyl-2-propionylthiazole	13679-83-9		11622				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
15.086	2-Methyl-2-thiazoline	2346-00-1					2	EFSA
15.087	2-Methyl-3-mercaptothiophene	2527-76-6						EFSA
15.089	2-Methylthiazole	3581-87-1		11626				EFSA
15.091	2-Methylthiophene	554-14-3		11631			4	EFSA
15.092	3-Methylthiophene	616-44-4		11632			4	EFSA
15.093	2-Octylthiophene	880-36-4					4	EFSA
15.096	2-Pentylthiophene	4861-58-9		11634			4	EFSA
15.097	2-Propionylthiophene	13679-75-9		11635			2	EFSA
15.098	2-Propylthiazole	17626-75-4						EFSA
15.103	1,2,4,5-Tetrathiane	291-22-5						EFSA
15.108	2-Thiophenemethanethiol	6258-63-5						EFSA
15.109	2,4,6-Trimethyldihydro-1,3,5(4H)-dithiazine	638-17-5	1049	11649			3	EFSA
15.110	2,4,6-Trimethyl-1,3,5-trithiane	2765-04-0						EFSA
15.111	1,2,4-Trithiolane	289-16-7						EFSA
15.113	5,6-Dihydro-2,4,6-tris(2-methylpropyl)4H-1,3,5-dithiazine	74595-94-1	1048				3	EFSA
15.115	2-Isobutyl-4-methyl thiazole	61323-24-8						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
15.116	2-Acetyl-4-ethylthiazole	233665-91-3						EFSA
15.118	4-Butylthiazole	53833-33-3						EFSA
15.119	2-Isobutyl-3-thiazoline	39800-92-5					2	EFSA
15.126	3-(Methylthio)-methylthiophen	61675-72-7	1765					EFSA
15.128	2-Propionyl-2-thiazoline	29926-42-9	1760				2	EFSA
15.130	5-Ethyl-4-methyl-2-(2-methylpropyl)-thiazoline	83418-53-5	1761				2	EFSA
15.131	5-Ethyl-4-methyl-2-(2-butyl)-thiazoline	83418-54-6	1762				2	EFSA
15.134	2,5-Dihydroxy-1,4-Dithiane	40018-26-6	550				1	EFSA
15.135	Ethyl thialdine	54717-14-5			At least 90%, secondary components less than 5% 3,5-diethyl-1,2,4-trithiolane, less than 2% thialdine, less than 3% other impurities		3	EFSA
16.001	Ammonium isovalerate	7563-33-9	1203	464				EFSA
16.002	Diammonium sulphide	12135-76-1		482				EFSA
16.006	N-Nonanoyl 4-hydroxy-3-methoxy-benzylamide	2444-46-4	1599	590				EFSA
16.007	Hydrogen sulfide	7783-06-4	1658	647				EFSA
16.009	Ammonia	7664-41-7		739				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
16.012	Glycyrrhizic acid	1405-86-3		2221		In categories 1 and 3 – not more than 375 mg/kg In category 5 – not more than 1 500 mg/kg In category 5.3 – not more than 5 000 mg/kg In category 7 – not more than 200 mg/kg In category 8 – not more than 25 mg/kg In category 9 – not more than 20 mg/kg In category 14.1 – not more than 50 mg/kg In category 14.2 – not more than 550 mg/kg		EFSA
16.013	N-Ethyl-2-isopropyl-5-methylcyclohexane carboxamide	39711-79-0	1601	2298				EFSA
16.015	Ethyl methylphenylglycidate	77-83-8	1577	6002				EFSA
16.016	Caffeine	58-08-2		11741		Restrictions for use as a flavouring substance: In category 1 – not more than 70 mg/kg In category 3 – not more than 70 mg/kg In category 5 – not more than 100 mg/kg In category 14.1 – not more than 150 mg/kg	1	EFSA
16.018	Ethyl 3-phenyl-2,3-epoxypropionate	121-39-1	1576	11844				EFSA
16.027	Thiamine hydrochloride	67-03-8	1030	10493				EFSA
16.030	2-Methyl-4-propyl-1,3-oxathiane	67715-80-4	464	11540				JECFA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
16.032	Theobromine	83-67-0				Restrictions for use as a flavouring substance: In category 1 – not more than 70 mg/kg In category 14.1 – not more than 100 mg/kg	1	EFSA
16.039	Potassium 2-(1'-ethoxy)ethoxypropionate		933					EFSA
16.040	Ethyl 2,3-epoxy-3-methyl-3-p-tolylpropionate	74367-97-8	1578	11707				EFSA
16.041	Sodium 2-(4-methoxyphenoxy)propionate	13794-15-5	1029					EFSA
16.043	beta-Caryophyllene epoxide	1139-30-6	1575	10500			2	EFSA
16.048	Ammonium chloride	12125-02-9				In categories 1, 8, 9, and 15 – not more than 3 g/kg In category 5 – <i>quantum satis</i> In category 12 – not more than 3g/kg except for salt substitutes 40g/kg In category 14.2 – not more than 25 g/l		EFSA
16.052	1,6-Hexalactam	105-60-2	1594					EFSA
16.053	2-Isopropyl- N,2,3-trimethylbutanamide	51115-67-4	1595	10459				EFSA
16.055	(R)-(+)-Sclareolide	564-20-5	1165					EFSA
16.056	Taurine	107-35-7	1435					EFSA
16.058	Naringin	10236-47-2		10286				EFSA
16.059	Ammonium hydrogen sulphide	12124-99-1		482				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
16.060	Glycyrrhizic acid, ammoniated	53956-04-0		2221		<p>In category 1 – not more than 40 mg/kg</p> <p>In category 3 – not more than 90 mg/kg</p> <p>In category 5 – not more than 1 500 mg/kg</p> <p>In category 5.3 - not more than 5 000 mg/kg</p> <p>In category 6 – not more than 45 mg/kg</p> <p>In categories 7 and 13 – not more than 60 mg/kg</p> <p>In category 9 – not more than 300 mg/kg</p> <p>In category 11 – not more than 100 mg/kg</p> <p>In category 12 – not more than 50 mg/kg</p> <p>In categories 14.1 and 14.2 – not more than 200 mg/kg</p> <p>In category 15 – not more than 150 mg/kg</p>		EFSA
16.061	Neohesperidin dihydrochalcone	20702-77-6				<p>Restrictions for use as a flavouring substance:</p> <p>In categories 1, 3, 4.2, 6, 8, 9, 10, 12 and 14 - not more than 3 mg/kg</p> <p>In categories 2, 5 and 7 - not more than 4 mg/kg</p> <p>In category 15 – not more than 5 mg/kg</p>		EFSA
16.062	trans-2-Methyl-4-propyl-1,3-oxathiane	59324-17-3						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
16.071	4,5-Epoxydec-2(trans)-enal	188590-62-7	1570		At least 87%; secondary component 8-9% 4,5-epoxydec-2(cis)-enal		1	EFSA
16.073	Sodium diacetate	126-96-5						EFSA
16.075	Ethyl vanillin beta-D-glucopyranoside	122397-96-0	892					EFSA
16.080	Tannic acid	72401-53-7		746				SCF/CoE
16.081	Sucrose octaacetate	126-14-7		11819				EFSA
16.083	5,7-dihydroxy-2-(4-hydroxy-3-methoxyphenyl)-2,3-dihydro-4H-chromen-4-one sodium salt	462631-45-4						EFSA
16.087	Dianthramid B	579-93-1	1552					EFSA
16.088	l-Menthylmethylether	1565-76-0	1415					EFSA
16.089	Ferric ammonium citrate	1185-57-5						EFSA
16.090	3-(3,4-Dimethoxyphenyl)-N-[2-(3,4-dimethoxyphenyl)-ethyl]-acrylamide	69444-90-2	1777				3	EFSA
16.091	Deca-(2E,4E)-dienoic acid isobutylamide	18836-52-7	1598				4	EFSA
16.092	(1R,2S,5R)-N,N-Dimethyl menthyl succinamide	544714-08-1	1602					EFSA
16.094	N-Ethyl (2E,6Z)-nonadienamide	608514-56-3	1596				4	EFSA
16.095	Cyclopropanecarboxamide, N-[(2E)-3,7-dimethyl-2,6-octadien-1-yl]-	744251-93-2	1779				1	EFSA
16.096	Ferrous lactate	5905-52-2						EFSA
16.097	Hesperetin	520-33-2						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
16.098	N-(1-Propylbutyl)-1,3-benzodioxole-5-carboxamide	745047-51-2	1767					EFSA
16.099	N-(2,4-Dimethoxy-benzyl)-N'-(2-pyridin-2-yl-ethyl)-oxalamide	745047-53-4	1768					EFSA
16.100	N1-(2-Methoxy-4-methylbenzyl)-N2-(2-(5-methylpyridin-2-yl)ethyl)oxalamide	745047-94-3	1769					EFSA
16.101	N1-(2-Methoxy-4-methylbenzyl)-N2-(2-(pyridin-2-yl)ethyl)oxalamide	745047-97-6	1770					EFSA
16.102	2,3,4,5,6-Pentahydroxy-N-(2-hydroxyethyl)-hexanamide	686298-93-1	1772					EFSA
16.103	Propanamide, 2-hydroxy-N-(2-hydroxyethyl)-.	5422-34-4	1774					EFSA
16.104	2-[(2-Hydroxypropanoyl)amino]ethyl dihydrogen phosphate	782498-03-7	1775					EFSA
16.105	(2R,3S,4S,5R)-2-[(2,3,4,5,6-Pentahydroxyhexanoyl)amino]ethyl dihydrogen phosphate	791807-20-0	1773					EFSA
16.107	2-Hydroxy-N-[2-(4-hydroxyphenyl)ethyl]-propionamide	781674-18-8						EFSA
16.109	3-(4-Hydroxyphenyl)-1-(2,4,6-trihydroxyphenyl)propan-1-one	60-82-2						EFSA
16.110	Naringin dihydrochalcone	18916-17-1						EFSA
16.111	Glycine, N-[[[(1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl]carbonyl]-, ethyl ester.	68489-14-5	1776				1	EFSA
16.112	Trilobatin	4192-90-9						EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
16.113	Rebaudioside A	58543-16-1				Restrictions for use as a flavouring substance: In categories 1, 3, 4.2, 5, 6, 12, 14.1 and 14.2 – not more than 10 mg/kg		EFSA
16.114	2-Pentyl-4-propyl-1,3-oxathiane	59323-81-8						EFSA
16.115	Cyclopropanecarboxylic acid (2-isopropyl-5-methyl-cyclohexyl)-amide	958660-02-1	2006				4	EFSA
16.116	4-Amino-5,6-dimethylthieno[2,3-d]pyrimidin-2(1H)-one	121746-18-7						EFSA
16.117	N-p-Benzeneacetonitrile-menthanecarboxamide	852379-28-3	2009				1	EFSA
16.118	N-(2-(Pyridine-2-yl)ethyl)-3-p-menthane-carboxamide	847565-09-7	2008				3	EFSA
16.119	N-(2-Methylcyclohexyl)-2,3,4,5,6-penta-fluorobenzamide	1003050-32-5					4	EFSA
16.120	4-Amino-5,6-dimethylthieno[2,3-d]pyrimidin-2(1H)-one hydrochloride	1033366-59-4						EFSA
16.121	Spilanthol	25394-57-4			Mixture of isomers of (2E,6Z,8E)-N-(2-methylpropyl)-2,6,8-decatrienamide: 74% (2E,6Z,8E)-, 17% (2E,6E,8E)-, 6% (2E,6E,8Z)-, 1% (2Z,6Z,8E)-, 0.5% (2E,6E,8E)-, 1% (2Z,6Z,8Z)-isomer, 1.5% other isomers.		3	EFSA
16.122	4-Methyl, 2-propyl, 1-3-oxathiane	1064678-08-5						EFSA
16.123	(1R,2S,5R)-N-(4-Methoxyphenyl)-5-methyl-2-(1-methylethyl)cyclohexanecarboxamide	68489-09-8					1	EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
16.124	(1R,2S,5R)-N-cyclopropyl-5-methyl-2-isopropyl cyclohexanecarboxamide	73435-61-7					1	EFSA
16.125	(2S,5R)-N-[4-(2-amino-2-oxoethyl)phenyl]-5-methyl-2-(propan-2-yl)cyclohexanecarboxamide	1119711-29-3					1	EFSA
16.126	3-[(4-amino-2,2-dioxido-1H-2,1,3-benzothiadiazin-5-yl)oxy]-2,2-dimethyl-N-propylpropanamide	1093200-92-0					1	EFSA
17.001	beta-Alanine	107-95-9	1418					EFSA
17.002	L-Alanine	56-41-7		11729				EFSA
17.003	L-Arginine	74-79-3	1438	11890				EFSA
17.005	Aspartic acid	56-84-8	1429	10078				EFSA
17.006	L-Cystine	56-89-3		11747				EFSA
17.007	Glutamine	56-85-9	1430					EFSA
17.008	L-Histidine	71-00-1	1431					EFSA
17.010	D,L-Isoleucine	443-79-8	1422	10127				EFSA
17.012	L-Leucine	61-90-5	1423	10482				EFSA
17.013	D,L-Lysine	70-54-2		11947				EFSA
17.014	D,L-Methionine	59-51-8	1424	569				EFSA
17.015	S-Methylmethioninesulphonium chloride	1115-84-0	1427	761				EFSA
17.017	D,L-Phenylalanine	150-30-1	1432	10488				EFSA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FL No.	Chemical Name	CAS No.	JECFA No.	CoE No.	Purity of the named substance at least 95% unless otherwise specified	Restrictions of Use	Footnote	Reference
17.018	L-Phenylalanine	63-91-2	1428	10488				EFSA
17.019	L-Proline	147-85-3	1425	10490				EFSA
17.020	D,L-Serine	302-84-1						EFSA
17.021	D,L-Threonine	80-68-2						EFSA
17.022	L-Thyrosine	60-18-4	1434					EFSA
17.023	D,L-Valine	516-06-3	1426					EFSA
17.024	D,L-Alanine	302-72-7	1437	11729				EFSA
17.026	L-Lysine	56-87-1	1439	11947				EFSA
17.027	L-Methionine	63-68-3						EFSA
17.028	L-Valine	72-18-4						EFSA
17.031	L-(+)-Lysine monohydrochloride	657-27-2		11947				EFSA
17.032	L-Cysteine hydrochloride	52-89-1		11746				EFSA
17.033	L-Cysteine	52-90-4	1419	10464				EFSA
17.034	Glycine	56-40-6	1421	11771				EFSA
17.035	4-Amino-butyrac acid	56-12-2	1771					EFSA
17.036	S-allyl-L-cysteine	21593-77-1	1710					EFSA
17.037	L-Methionylglycine	14486-03-4					1	EFSA

PART B

Flavouring preparations

PART C

Thermal process flavourings

PART D

Flavour precursors

PART E

Other flavourings

PART F

Source materials

COMMISSION REGULATION (EU) No 873/2012**of 1 October 2012****on transitional measures concerning the Union list of flavourings and source materials set out in Annex I to Regulation (EC) No 1334/2008 of the European Parliament and of the Council****(Text with EEA relevance)**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 1334/2008 of the European Parliament and of the Council of 16 December 2008 on flavourings and certain food ingredients with flavouring properties for use in and on foods and amending Council Regulation (EEC) No 1601/91, Regulations (EC) No 2232/96 and (EC) No 110/2008 and Directive 2000/13/EC⁽¹⁾, and in particular Article 25(3) thereof,

Whereas:

- (1) Article 9 of Regulation (EC) No 1334/2008 lays down the type of flavourings and source materials for which an evaluation and approval is required.
- (2) Article 10 of Regulation (EC) No 1334/2008 provides that, of the flavourings and source materials referred to in Article 9, only those included in the Union list may be placed on the market as such and used in or on foods under the conditions of use specified therein, where applicable.
- (3) Article 30 of Regulation (EC) No 1334/2008 specifies that Article 10 is to apply from 18 months after the date of application of the Union list.
- (4) It is therefore appropriate to fix that date of application of the Union list for the purposes of third paragraph of Article 30 of Regulation (EC) No 1334/2008.
- (5) As a first step, a Union list of flavouring substances referred to in point (a) of Article 9 of Regulation (EC) No 1334/2008 has been established by Commission Regulation (EU) No 872/2012⁽²⁾ by introducing the list of flavouring substances referred to in Regulation (EC) No 2232/96 of the European Parliament and of the Council⁽³⁾ into Annex I to Regulation (EC) No 1334/2008 and by fixing the dates of application of that list.
- (6) Pursuant to Regulation (EC) No 1334/2008 flavouring substances not included in the Union list may be placed on the market as such and used in or on food until 18 months after the date of application of the Union list. Since flavouring substances are already on the market in the Member States, provision should be made to ensure that the transition to a Union authorisation procedure is smooth. To increase legal certainty, a transitional period should be provided also for food containing those flavouring substances.
- (7) As a second step, the flavourings and source materials referred to in Article 9(b) to (f) must be evaluated. The interested parties are to submit applications for updating the Union list by adding a substance to the list pursuant to Regulation (EC) No 1331/2008 and are to follow Commission Regulation (EU) No 234/2011 of 10 March 2011 implementing Regulation (EC) No 1331/2008 of the European Parliament and of the Council establishing a common authorisation procedure for food additives, food enzymes and food flavourings⁽⁴⁾ as to the data required and as to the content, drafting and presentation of the applications for authorisation of flavourings and source materials listed in Article 9(b) to (f) of Regulation (EC) No 1334/2008.
- (8) In accordance with the objectives of Regulation (EC) No 1334/2008, in order to enhance legal certainty and non-discrimination it is appropriate to adopt transitional measures to allow the time for evaluation and authorisation of those flavourings and source materials.
- (9) The date of application of Parts B to F of Annex I to Regulation (EC) No 1334/2008, concerning flavourings and source materials listed in Article 9(b) to (f) of that Regulation, should be postponed to allow the time for evaluation and authorisation of those flavourings and source materials.
- (10) The interested parties should submit applications for authorisations within a set time limit as regards flavourings and source materials listed in Article 9(b) to (f) of Regulation (EC) No 1334/2008 that are currently placed on the market.

⁽¹⁾ OJ L 354, 31.12.2008, p. 34.

⁽²⁾ See page 1 of this Official Journal.

⁽³⁾ OJ L 299, 23.11.1996, p. 1.

⁽⁴⁾ OJ L 64, 11.3.2011, p. 15.

(11) Pursuant to Regulation (EC) No 1334/2008 flavourings and source materials listed in Article 9(b) to (f) not included in the Union list may be placed on the market as such and used in or on food until 18 months after the date of application of the Union list. Since flavourings and source materials listed in Article 9(b) to (f) of Regulation (EC) No 1334/2008 are already on the market in the Member States, provision should be made to ensure that the transition to a Union authorisation procedure is smooth. To increase legal certainty, a transitional period should be provided also for food containing those flavourings and source materials.

(12) Article 30 of Regulation (EC) No 1334/2008 specifies that Articles 26 and 28 of Regulation (EC) No 1334/2008 concerning amendments to Council Regulation (EEC) No 1601/91 of 10 June 1991 laying down general rules on the definition, description and presentation of aromatised wines, aromatised wine-based drinks and aromatised wine-product cocktails⁽⁵⁾ and to Regulation (EC) No 110/2008 of the European Parliament and of the Council of 15 January 2008 on the definition, description, presentation, labelling and the protection of geographical indications of spirit drinks⁽⁶⁾ are to apply from the date of application of the Union list. It is therefore appropriate to fix that date of application for the purposes of the fourth paragraph of Article 30 of Regulation (EC) No 1334/2008.

(13) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on the Food Chain and Animal Health and neither the European Parliament nor the Council have opposed them,

HAS ADOPTED THIS REGULATION:

CHAPTER I

FLAVOURING SUBSTANCES REFERRED TO IN ARTICLE 9(a) OF REGULATION (EC) No 1334/2008

Article 1

Transitional measures for food containing flavouring substances

Foods containing flavouring substances, which are lawfully placed on the market or labelled prior to 22 October 2014 but which do not comply with Part A of Annex I to Regulation (EC) No 1334/2008 may be marketed until their date of minimum durability or use-by-date.

⁽⁵⁾ OJ L 149, 14.6.1991, p. 1.

⁽⁶⁾ OJ L 39, 13.2.2008, p. 16.

CHAPTER II

FLAVOURINGS AND SOURCE MATERIALS REFERRED TO IN ARTICLE 9(b) TO (f) OF REGULATION (EC) No 1334/2008

Article 2

Date of application of Parts B to F of the Union list of flavourings and source materials

For the purposes of the third paragraph of Article 30 in conjunction with Article 10 of Regulation (EC) No 1334/2008, Parts B to F of the Union list of flavourings and source materials set out in Annex I to that Regulation, shall apply from 22 October 2016.

Article 3

Time limit for submissions

Interested parties shall submit applications for authorisation of flavourings and source materials referred to in Article 9(b) to (f) of Regulation (EC) No 1334/2008 placed on the market at the time of entry into force of this Regulation to the Commission in accordance with the Regulation (EC) No 1331/2008 at the latest by 22 October 2015.

Article 4

Transitional measure for food containing flavourings and source materials referred to in Article 9(b) to (f) of Regulation (EC) No 1334/2008

Foods containing flavourings and source materials referred to in Article 9(b) to (f) of Regulation (EC) No 1334/2008 which are lawfully placed on the market or labelled prior to 22 April 2018 but which do not comply with Parts B to F of Annex I to Regulation (EC) No 1334/2008, may be marketed until their date of minimum durability or use-by-date.

CHAPTER III

FINAL PROVISIONS

Article 5

Amendments to Regulations (EEC) No 1601/91 and (EC) No 110/2008

For the purposes of the fourth paragraph of Article 30 of Regulation (EC) No 1334/2008, concerning amendments to Regulations (EEC) No 1601/91 and (EC) No 110/2008, the date of application of the Union list of flavourings and source materials shall be 22 April 2013.

*Article 6***Entry into force**

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 1 October 2012.

For the Commission
The President
José Manuel BARROSO

COMMISSION REGULATION (EU) No 985/2013

of 14 October 2013

amending and correcting Annex I to Regulation (EC) No 1334/2008 of the European Parliament and of the Council as regards certain flavouring substances

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 1334/2008 of the European Parliament and of the Council of 16 December 2008 on flavourings and certain food ingredients with flavouring properties for use in and on foods and amending Council Regulation (EEC) No 1601/91, Regulations (EC) No 2232/96 and (EC) No 110/2008 and Directive 2000/13/EC⁽¹⁾, and in particular Article 11(3) thereof,

Having regard to Regulation (EC) No 1331/2008 of the European Parliament and of the Council of 16 December 2008 establishing a common authorisation procedure for food additives, food enzymes and food flavourings⁽²⁾, and in particular Article 7(5) thereof,

Whereas:

- (1) Annex I to Regulation (EC) No 1334/2008 lays down a Union list of flavourings and source materials for use in food and their conditions of use.
- (2) Part A of the Union list contains both evaluated flavouring substances, which are assigned no footnotes and flavourings substances under evaluation, which are identified by footnote references 1 to 4 in that list.
- (3) The European Food Safety Authority has completed the assessment of 23 substances which are currently listed as flavouring substances under evaluation. Those flavouring substances were assessed by the EFSA in the following flavouring group evaluations: evaluation FGE.06rev4⁽³⁾ (substances FL Nos 02.229, 05.137, 09.562 and 09.854), evaluation FGE.07rev4⁽⁴⁾ (substances FL Nos 02.145, 02.194, 02.211, 07.198 and 07.204), evaluation FGE.08rev5⁽⁵⁾ (substance FL No 15.134), evaluation FGE.09rev4⁽⁶⁾ (substances FL Nos 07.202 and 07.255), evaluation FGE.12rev3⁽⁷⁾ (substance FL No 05.182),

evaluation FGE.20rev4⁽⁸⁾ (substances FL Nos 05.026, 05.028, 05.029 and 09.858), evaluation in FGE.23rev4⁽⁹⁾ (substance FL No 13.170), evaluation in FGE.63rev1⁽¹⁰⁾ (substances FL Nos 02.252, 07.190 and 09.936), evaluation FGE.94rev1⁽¹¹⁾ (substance FL No 16.095) and evaluation FGE.304⁽¹²⁾ (substance FL No 16.123). The EFSA concluded that those flavouring substances do not give rise to safety concerns at the estimated levels of dietary intakes.

- (4) Therefore, the flavouring substances assessed in those flavouring group evaluations should be listed as evaluated substances by deleting footnote references 1 to 4 in the relevant entries of the Union list.
- (5) After publication of the Union list, certain errors have been identified in that list. Those errors are related to names, CAS-numbers, JECFA-numbers or secondary components of the followings substances: FL Nos 02.093, 02.110, 05.085, 08.004, 09.016, 09.131, 09.132, 09.266, 09.578, 09.596, 09.880, 12.075, 12.086, 12.273, 13.028, 13.190, 14.067 and 17.015. The errors should be corrected.
- (6) Part A of Annex I to Regulation (EC) No 1334/2008 should therefore be amended and corrected accordingly.
- (7) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on the Food Chain and Animal Health,

HAS ADOPTED THIS REGULATION:

Article 1

Part A of Annex I to Regulation (EC) No 1334/2008 is amended in accordance with the Annex to this Regulation.

Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

⁽¹⁾ OJ L 354, 31.12.2008, p. 34.

⁽²⁾ OJ L 354, 31.12.2008, p. 1.

⁽³⁾ EFSA Journal 2013; 11(2):3091.

⁽⁴⁾ EFSA Journal 2012; 10(10):2899.

⁽⁵⁾ EFSA Journal 2012; 10(7):2837.

⁽⁶⁾ EFSA Journal 2012; 10(7):2836.

⁽⁷⁾ EFSA Journal 2012; 10(12):2993.

⁽⁸⁾ EFSA Journal 2012; 10(12):2994.

⁽⁹⁾ EFSA Journal 2013; 11(2):3092.

⁽¹⁰⁾ EFSA Journal 2012; 10(10):2900.

⁽¹¹⁾ EFSA Journal 2012; 10(6):2747.

⁽¹²⁾ EFSA Journal 2012; 10(10):2903.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 14 October 2013.

For the Commission
The President
José Manuel BARROSO

ANNEX

Part A of Annex I to Regulation (EC) No 1334/2008 is amended as follows:

(1) the entry concerning FL No 02.093 is replaced by the following:

'02.093	(Z)-Non-6-en-1-ol	35854-86-5	324	10294				JECFA'
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(2) the entry concerning FL No 02.110 is replaced by the following:

'02.110	2,6-Dimethylhept-6-en-1-ol	36806-46-9	348		At least 90 %; secondary component 5-10 % 2,6-dimethyl-5-hepten-1-ol			JECFA'
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(3) the entry concerning FL No 02.145 is replaced by the following:

'02.145	2,6-Dimethylocta-1,5,7-trien-3-ol	29414-56-0						EFSA'
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(4) the entry concerning FL No 02.194 is replaced by the following:

'02.194	Octa-1,5-dien-3-ol	83861-74-9						EFSA'
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(5) the entry concerning FL No 02.211 is replaced by the following:

'02.211	Undeca-1,5-dien-3-ol	56722-23-7						EFSA'
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(6) the entry concerning FL No 02.229 is replaced by the following:

'02.229	(-)-3,7-Dimethyl-6-octen-1-ol	7540-51-4			At least 90 % cis-isomer; secondary components 2-6 % di-unsaturated and saturated C10 alcohols, 2-4 % citronellyl acetate and 2-3 % citro- nellal			EFSA'
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(7) the entry concerning FL No 02.252 is replaced by the following:

'02.252	4,8-Dimethyl-3,7-nonadien-2-ol	67845-50-5	1841					EFSA'
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(8) the entry concerning FL No 05.026 is replaced by the following:

'05.026	o-Tolualdehyde	529-20-4						EFSA'
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(9) the entry concerning FL No 05.028 is replaced by the following:

'05.028	m-Tolualdehyde	620-23-5						EFSA'
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(10) the entry concerning FL No 05.029 is replaced by the following:

'05.029	p-Tolualdehyde	104-87-0						EFSA'
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(11) the entry concerning FL No 05.085 is replaced by the following:

'05.085	(Z)-Hept-4-enal	6728-31-0	320	2124	At least 93 % of Z-form of hept-4-enal; secondary component 2-5 % of E-form of hept-4-enal.			JECFA'
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(12) the entry concerning FL No 05.137 is replaced by the following:

'05.137	Dec-4(cis)-enal	21662-09-9			At least 90 %; secondary component at least 5 % trans-isomer			EFSA'
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(13) the entry concerning FL No 05.182 is replaced by the following:

'05.182	2,6,6-Trimethylcyclohex-2-ene-1-carboxaldehyde	432-24-6						EFSA'
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(14) the entry concerning FL No 07.190 is replaced by the following:

'07.190	Octa-1,5-dien-3-one	65213-86-7	1848		Mixture of stereoisomers: 60-90 % E-form and 10-40 % Z-form			EFSA'
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(15) the entry concerning FL No 07.198 is replaced by the following:

'07.198	Pseudo-ionone	141-10-6		11191				EFSA'
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(16) the entry concerning FL No 07.202 is replaced by the following:

'07.202	2,6,6-Trimethylcyclohex-2-en-1-one	20013-73-4						EFSA'
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(17) the entry concerning FL No 07.204 is replaced by the following:

'07.204	3,3,6-Trimethylhepta-1,5-dien-4-one	546-49-6						EFSA'
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(18) the entry concerning FL No 07.255 is replaced by the following:

'07.255	l-Piperitone	4573-50-6	1856					EFSA'
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(19) the entry concerning FL No 08.004 is replaced by the following:

'08.004	Lactic acid	50-21-5	930	4				EFSA'
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(20) the entry concerning FL No 09.016 is replaced by the following:

'09.016	Menthyl acetate	16409-45-3	431	206				JECFA'
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(21) the entry concerning FL No 09.131 is replaced by the following:

'09.131	DL-Isobornyl propionate	2756-56-1	1391	412				EFSA'
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(22) the entry concerning FL No 09.132 is replaced by the following:

'09.132	Benzyl propionate	122-63-4	842	413				EFSA'
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(23) the entry concerning FL No 09.266 is replaced by the following:

'09.266	Hexyl 2-butenate	19089-92-0	1807	10688				EFSA'
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(24) the entry concerning FL No 09.562 is replaced by the following:

'09.562	trans-3-Hexenyl formate	56922-80-6						EFSA'
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(25) the entry concerning FL No 09.578 is replaced by the following:

'09.578	Hexyl (E)-but-2-enoate	1617-25-0		10688				EFSA'
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(26) the entry concerning FL No 09.596 is replaced by the following:

'09.596	Isopentyl-(Z)-but-2-enoate	10482-55-0						EFSA'
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(27) the entry concerning FL No 09.854 is replaced by the following:

'09.854	cis-3-Hexenyl 2-methylbutanoate	53398-85-9						EFSA'
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(28) the entry concerning FL No 09.858 is replaced by the following:

'09.858	Phenylmethyl 2-methyl-2-butenolate	67674-41-3			Mixture of stereoisomers: 60-90 % E-form and 10-40 % Z-form			EFSA'
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(29) the entry concerning FL No 09.880 is replaced by the following:

'09.880	(Z)-Hept-4-en-2-yl butanoate	94088-12-7						EFSA'
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(30) the entry concerning FL No 09.936 is replaced by the following:

'09.936	4,8-Dimethyl-3,7-nonadien-2-yl acetate	91418-25-6	1847					EFSA'
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(31) the entry concerning FL No 12.075 is replaced by the following:

'12.075	Methyl prop-1-enyl disulfide	5905-47-5	569	11712	At least 90 %; secondary components 3-4 % dimethyl disulfide and 3-4 % di-1-propenyl disulfide			JECFA'
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(32) the entry concerning FL No 12.086 is replaced by the following:

'12.086	S-Methyl 2-methylbutanethioate	42075-45-6	486					JECFA'
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(33) the entry concerning FL No 12.273 is replaced by the following:

'12.273	3-(Methylthio)heptanal	51755-70-5	1692		At least 92 %; secondary component 5-7 % (E)-hept-2-enal			EFSA'
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(34) the entry concerning FL No 13.028 is replaced by the following:

'13.028	2-Butyl-5 or 6-keto-1,4-dioxane	65504-95-2	1484	2206				EFSA'
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(35) the entry concerning FL No 13.170 is replaced by the following:

'13.170	2S-cis-Tetrahydro-4-methyl-2-(2-methyl-1-propenyl)-2H-pyran	3033-23-6						EFSA'
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(36) the entry concerning FL No 13.190 is replaced by the following:

'13.190	3-((2-methyl-3-furyl)thio)-2-butanone	61295-44-1	1525					EFSA'
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(37) the entry concerning FL No 14.067 is replaced by the following:

'14.067	2-Ethoxy-3-methylpyrazine	32737-14-7	793	11921	At least 82 % 2-ethoxy-3-methylpyrazine. Secondary components 15 % 2-ethoxy-5-methylpyrazine (CAS no 67845-34-5) or 2-ethoxy-6-methylpyrazine (CAS no 53163-97-6)			EFSA'
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(38) the entry concerning FL No 15.134 is replaced by the following:

'15.134	2,5-Dihydroxy-1,4-dithiane	40018-26-6	550		Mixture of diastereoisomers: 25-30 % of (2S,5S and 2R,5R) and 70-75 % (2S,5R and 2R,5S)			EFSA'
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(39) the entry concerning FL No 16.095 is replaced by the following:

'16.095	Cyclopropanecarboxamide, N-[(2E)-3,7-dimethyl-2,6-octadien-1-yl]-	744251-93-2	1779					EFSA'
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(40) the entry concerning FL No 16.123 is replaced by the following:

'16.123	(1R,2S,5R)-N-(4-Methoxyphenyl)-5-methyl-2-(1-methylethyl)cyclohexanecarboxamide	68489-09-8						EFSA'
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(41) the entry concerning FL No 17.015 is replaced by the following:

'17.015	DL-Methylmethioninesulphonium chloride	3493-12-7	1427	761				EFSA'
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COMMISSION IMPLEMENTING REGULATION (EU) No 1321/2013**of 10 December 2013****establishing the Union list of authorised smoke flavouring primary products for use as such in or on foods and/or for the production of derived smoke flavourings****(Text with EEA relevance)**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 2065/2003 of the European Parliament and of the Council of 10 November 2003 on smoke flavourings used or intended to be used in or on foods ⁽¹⁾, and in particular Article 6 thereof,

Whereas:

- (1) Article 10(2) of Regulation (EC) No 2065/2003 provides for the initial establishment of a Union list of authorised smoke flavouring primary products (hereinafter referred to as 'primary products'). That list is to be established on the basis of applications for authorisation submitted by business operators and the opinion issued by the European Food Safety Authority ('the Authority') on the relevant primary product.
- (2) In accordance with Article 10 of Regulation (EC) No 2065/2003, the Authority received 14 valid applications for authorisation of primary products before 16 June 2005. Three applications have been withdrawn. Therefore the Authority has evaluated in total 11 primary products. One evaluated application has been withdrawn after completion of the evaluation.
- (3) According to Article 4(1) of Regulation (EC) No 2065/2003 the authorisation of smoke flavourings may be subject to specific conditions of use and according to Article 9(3) of that Regulation authorisations should be granted for 10 years, renewable in accordance with Article 12 of that Regulation.
- (4) Primary products and derived smoke flavourings are used in or on food to impart a smoke taste or to complement another flavour without imparting smoke flavour. They are also used to smoke meat, fish and dairy products. The refined exposure study carried out by Rijksinstituut

voor Volksgezondheid en Milieu (RIVM) ⁽²⁾ shows that regardless of the exposure calculation method used, the main contributors to the high intake are predominantly foods that used to be traditionally smoked, such as cooked smoked sausage and bacon. The food groups that are not traditionally smoked, such as crisps, soups and sauces, do not significantly affect exposure. Because primary products are produced from smoke which is subjected to fractionation and purification processes, the use of smoke flavourings is generally considered to be of less health concern than the use of smoke that is made by burning wood or by heating saw dust or small wood chips ⁽³⁾.

- (5) The safety assessment of the Authority on the primary product Scansmoke PB1110, adopted on 26 March 2009 ⁽⁴⁾, concludes that the data provided by the applicant is sufficient to eliminate the concerns over its genotoxicity. However the uses and use levels as originally proposed by the applicant would provide an insufficient margin of safety. The uses and the use levels have been revised to take into account this opinion. The primary product Scansmoke PB1110 should therefore be authorised subject to specific conditions of use.
- (6) The safety assessment of the Authority on the primary product Zesti Smoke Code 10, adopted on 29 January 2009 ⁽⁵⁾ and on 6 July 2011 ⁽⁶⁾, concludes that the data provided by the applicant is sufficient to eliminate the concerns over its genotoxicity. However, the uses and use levels as originally proposed by the applicant provide an insufficient margin of safety. The uses and the use levels have been revised to take into account this opinion. The primary product Zesti Smoke Code 10 should therefore be authorised subject to specific conditions of use.
- (7) The safety assessment of the Authority on the primary product Smoke Concentrate 809045, adopted on 29 January 2009 ⁽⁷⁾, concludes that the data provided by the applicant is sufficient to eliminate the concerns over its genotoxicity. The uses and use levels as proposed by the applicant do not give rise to safety concern. The primary product Smoke Concentrate 809045 should therefore be authorised subject to specific conditions of use.

⁽¹⁾ OJ L 309, 26.11.2003, p. 1.

⁽²⁾ 'Refined exposure assessment of smoke flavouring primary products with use levels provided by the industry. A pilot study into data collection of use levels.' RIVM Letter report 320026003.

⁽³⁾ *EFSA Journal* 2008; 724, 1-114.

⁽⁴⁾ *EFSA Journal* 2009; ON-1056, 1-23.

⁽⁵⁾ *EFSA Journal* 2009; ON-982, 1-24.

⁽⁶⁾ *EFSA Journal* 2011; 9(7):2307.

⁽⁷⁾ *EFSA Journal* 2009; ON-981, 1-19.

- (8) The safety assessment of the Authority on the primary product Scansmoke SEF 7525, adopted on 14 May 2009⁽¹⁾, concludes that the data provided by the applicant is sufficient to eliminate the concerns over its genotoxicity. The uses and use levels as proposed by the applicant do not give rise to safety concern. The primary product Scansmoke SEF 7525 should therefore be authorised subject to specific conditions of use.
- (9) The safety assessment of the Authority on the primary product SmokEz C-10, adopted on 14 May 2009⁽²⁾ and on 4 July 2012⁽³⁾, concludes that the data provided by the applicant is sufficient to eliminate the concerns over its genotoxicity. However, the uses and use levels as originally proposed by the applicant provide an insufficient margin of safety. The uses and the use levels have been revised to take into account this opinion. The primary product SmokEz C-10 should therefore be authorised subject to specific conditions of use.
- (10) The safety assessment of the Authority on the primary product SmokEz Enviro-23, adopted on 14 May 2009⁽⁴⁾ and on 4 July 2012⁽⁵⁾, concludes that the data provided by the applicant is sufficient to eliminate the concerns over its genotoxicity. However, the uses and use levels as originally proposed by the applicant provide an insufficient margin of safety. The uses and the use levels have been revised to take into account this opinion. The primary product SmokEz Enviro-23 should therefore be authorised subject to specific conditions of use.
- (11) The safety assessment of the Authority on the primary product Tradismoke™ A MAX, adopted on 26 November 2009⁽⁶⁾, concludes that the data provided by the applicant is sufficient to eliminate the concerns over its genotoxicity. However, the uses and use levels as originally proposed by the applicant provide an insufficient margin of safety. The uses and the use levels have been revised to take into account this opinion. The primary product Tradismoke™ A MAX should therefore be authorised subject to specific conditions of use.
- (12) The safety assessment of the Authority on the primary product Scansmoke R909, adopted on 26 November 2009⁽⁷⁾, concludes that the data provided by the applicant is sufficient to eliminate the concerns over its genotoxicity. However, the uses and use levels as originally proposed by the applicant provide an insufficient margin of safety. The uses and the use levels have been revised to take into account this opinion. The applicant notified to the Commission on 26 November 2012 that the name of the primary product had been changed to proFagus-Smoke R709. The primary product proFagus-Smoke R709 should therefore be authorised subject to specific conditions of use.
- (13) The safety assessment of the Authority on the primary product Fumokomp, adopted on 24 September 2009⁽⁸⁾ and on 6 July 2011⁽⁹⁾, concludes that the data provided by the applicant is sufficient to eliminate the concerns over its genotoxicity. The uses and use levels as proposed by the applicant do not give rise to safety concern. The primary product Fumokomp should therefore be authorised subject to specific conditions of use.
- (14) The safety assessment of the Authority on the primary product AM 01, adopted on 26 November 2009⁽¹⁰⁾ and on 2 February 2012⁽¹¹⁾, concludes that the data provided by the applicant is sufficient to eliminate the concerns over its genotoxicity. However, the uses and use levels as originally proposed by the applicant provide an insufficient margin of safety. The uses and the use levels have been revised to take into account this opinion. The primary product AM 01 should therefore be authorised subject to specific conditions of use.
- (15) In respect of each authorised primary product, the Union list should provide a unique product code, the name of the product, the name and address of the authorisation holder, a description and characterisation of the product, the conditions of its use in or on specific foods or food categories, the date from which the product is authorised and the date until which the product is authorised. For the purpose of this Regulation, the food categories as laid down in Annex II to Regulation (EC) No 1333/2008 of the European Parliament and of the Council of 16 December 2008 on food additives⁽¹²⁾, should be referred to.
- (16) Conditions for the production of primary products are laid down in Annex I of the Regulation (EC) No 2065/2003 including maximum content of polycyclic aromatic hydrocarbons.
- (17) When authorised smoke flavourings are used in or on food, their use must be in accordance with the conditions of use, including maximum levels, set in the Annex to this Regulation. When authorised smoke flavourings are used in combination, the individual levels should be reduced proportionally.

⁽¹⁾ EFSA Journal 2009; 1224, 1-24.

⁽²⁾ EFSA Journal 2009; 1225, 1-28.

⁽³⁾ EFSA Journal 2012; 10(7):2830.

⁽⁴⁾ EFSA Journal 2009; 1226, 1-26.

⁽⁵⁾ EFSA Journal 2012; 10(7):2829.

⁽⁶⁾ EFSA Journal 2010; 8(1):1394.

⁽⁷⁾ EFSA Journal 2010; 8(1):1395.

⁽⁸⁾ EFSA Journal 2009; 7(9):1343.

⁽⁹⁾ EFSA Journal 2011; 9(7):2308.

⁽¹⁰⁾ EFSA Journal 2010; 8(1):1396.

⁽¹¹⁾ EFSA Journal 2012; 10(2):2580.

⁽¹²⁾ OJ L 354, 31.12.2008, p. 16.

- (18) Smoking by regenerated smoke is a process of treating food by exposing it to smoke which is regenerated by atomizing smoke flavourings in a smoking chamber under the time and temperature conditions similar to those for hot or cold smoking. In that case it is difficult to estimate how much of the smoke flavourings will be present in the final food as marketed due to loss of smoke flavouring during smoking. Therefore, the use should be in accordance with good manufacturing practices.
- (19) Unless subject to further restrictions, an authorised smoke flavouring may be present in food, other than by direct addition, as a result of carry-over from an ingredient in which the smoke flavouring was permitted, provided that the level of the smoke flavouring in the final food is no greater than would be introduced by the use of the ingredient under proper technological conditions and good manufacturing practice.
- (20) The Union list of smoke flavourings should apply without prejudice to other provisions laid down in sector specific legislation.
- (21) Since smoke flavourings are already on the market in the Member States, provisions have been made to ensure that the transition to a Union authorisation procedure is smooth. To this effect transitional periods have been laid down in Article 20 of Regulation (EC) No 2065/2003.
- (22) Pursuant to Article 12 of Regulation (EC) No 2065/2003, authorisations are renewable for 10-year periods on application to the Commission by the authorisation holder. The application must be accompanied by the documents listed in Article 12(2) of that Regulation. Those documents must include any available information concerning toxicological data following the advice of Authority given in its guidance document of 7 October 2004 or its latest update.
- (23) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on Food Chain and Animal Health,

HAS ADOPTED THIS REGULATION:

Article 1

The list of the smoke flavouring primary products authorised to the exclusion of all others in the Union for use in or on foods and/or for the production of derived smoke flavourings, as referred to in Article 6 of Regulation (EC) No 2065/2003, is laid down in the Annex to this Regulation.

Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

The list of the authorised smoke flavourings is established with the effect from 1 January 2014.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 10 December 2013.

For the Commission

The President

José Manuel BARROSO

ANNEX

Union list of authorised smoke flavouring primary products for use as such in or on foods and/or for the production of derived smoke flavourings

Note 1: Maximum levels refer to levels in or on food as marketed. By way of derogation from this principle, for dried and/or concentrated foods which need to be reconstituted the maximum levels shall apply to the food as reconstituted according to the instructions on the label taking into account the minimum dilution factor. If primary products are used for the production of the derived smoke flavourings, the maximum levels shall be adjusted accordingly.

Note 2: When combinations of smoke flavourings are used in or on foodstuffs, the individual levels shall be reduced proportionally.

Note 3: In case smoke flavourings are permitted to be used in processed meat (food category 8.2) or in processed fish and fishery products (food category 9.2) and these foods are smoked in a smoking chamber by regenerating smoke by using these permitted smoke flavourings, the use shall be in accordance with good manufacturing practices.

Note 4: The presence of a smoke flavouring shall be permitted:

- (a) in a compound food other than as referred to in the Annex, where the primary product is permitted in one of the ingredients of the compound food;
- (b) in a food which is to be used solely in the preparation of a compound food and provided that the compound food complies with this Regulation.

This shall not apply to infant formulae, follow-on formulae, processed cereal-based foods and baby foods and dietary foods for special medical purposes intended for infants and young children as referred to in Directive 2009/39/EC of the European Parliament and of the Council of 6 May 2009 on foodstuffs intended for particular nutritional uses ⁽¹⁾.

Unique code	SF-001	
Name of the product	Scansmoke PB 1110	
Name of the authorisation holder	Azelis Denmark A/S	
Address of the authorisation holder	Lundtoftegaardsvej 95 2800 Lyngby DENMARK	
Description and characterisation of the product	<ol style="list-style-type: none"> 1. Source materials: 90 % beech (<i>Fagus sylvatica</i>), 10 % oak (<i>Quercus alba</i>) 2. Specifications: <ul style="list-style-type: none"> — pH: 2,1 – 2,9 — Water: 47,0 – 56,0 % — Acid % (expressed as acetic acid): 8 – 12 % — Carbonyl compounds: 17 – 25 % — Phenols (as syringol, mg/g): 10,5 – 20,1 3. Purity criteria: <ul style="list-style-type: none"> — Lead: < 5,0 mg/kg — Arsenic: < 3,0 mg/kg — Cadmium: < 1,0 mg/kg — Mercury: < 1,0 mg/kg 	
Conditions of use	Food category	Maximum level g/kg
	1.7. Cheese and cheese products	2,0
	2. Fats and oils and fat and oil emulsions	0,002
	3. Edible ices	0,005
	5. Confectionery	0,05

⁽¹⁾ OJ L 124, 20.5.2009, p. 21.

	8.1.2. Meat preparations as defined by Regulation (EC) No 853/2004 of the European Parliament and of the Council ⁽¹⁾	2,0
	8.2. Processed meat	2,0
	9.2. Processed fish and fishery products including crustaceans and molluscs	2,0
	9.3. Fish roe	2,0
	12.2. Herbs, spices, seasonings	2,3
	12.5. Soups and broths	0,23
	12.6. Sauces	1,0
	12.7. Salads and savoury based sandwich spreads	0,23
	14.1. Non-alcoholic beverages	0,02
	14.2. Alcoholic beverages, including alcohol-free and low-alcohol counterparts	0,02
	15. Ready-to-eat savouries and snacks	2,0
Date from which the product is authorised	1 January 2014	
Date until which the product is authorised	1 January 2024	

⁽¹⁾ OJ L 139, 30.4.2004, p. 55.

Unique code	SF-002	
Name of the product	Zesti Smoke Code 10	
Name of the authorisation holder	Mastertaste	
Address of the authorisation holder	Draycott Mills Cam Dursley Gloucestershire GL11 5NA UNITED KINGDOM	
Description and characterisation of the product	<p>1. Source material: 50 – 60 % of hickory (<i>Carya ovata</i>), 40 – 50 % oak (<i>Quercus alba</i>)</p> <p>2. Specifications:</p> <ul style="list-style-type: none"> — pH: 2,0 – 2,5 — Water: 62,3 – 65,7 % — Acid % (expressed as acetic acid): 10,5 – 11 % — Carbonyl compounds (g/100 ml): 15 – 25 — Phenols (mg/ml): 12 – 22 <p>3. Purity criteria:</p> <ul style="list-style-type: none"> — Lead: < 5,0 mg/kg — Arsenic: < 3,0 mg/kg — Cadmium: < 1,0 mg/kg — Mercury: < 1,0 mg/kg 	
Conditions of use	Food category	Maximum level g/kg
	1.7. Cheese and cheese products	0,50
	1.8. Dairy analogues, including beverage whiteners	0,50

	4.2. Processed fruits and vegetables	0,30
	8.1.2. Meat preparations as defined by Regulation (EC) No 853/2004	2,5
	8.2. Processed meat	2,5
	9.2. Processed fish and fishery products including crustaceans and molluscs	2,0
	9.3. Fish roe	2,0
	12.2. Herbs, spices, seasonings	3,0
	12.5. Soups and broths	0,30
	12.6. Sauces	1,0
	12.9. Protein products, excluding products covered in category 1.8	1,0
	15. Ready-to-eat savouries and snacks	3,0
Date from which the product is authorised	1 January 2014	
Date until which the product is authorised	1 January 2024	
Unique code	SF-003	
Name of the product	Smoke Concentrate 809045	
Name of the authorisation holder	Symrise AG	
Address of the authorisation holder	Mühlenfeldstraße 1 37603 Holzminden GERMANY	
Description and characterisation of the product	<p>1. Source material: Beech (<i>Fagus sylvatica</i>)</p> <p>2. Specifications:</p> <ul style="list-style-type: none"> — pH: 2 – 3 — Water: 5 – 15 % — Acid % (expressed as acetic acid): 8 – 15 % — Carbonyl compounds: 10 – 20 % — Phenols: 0,2 – 0,6 % <p>3. Purity criteria:</p> <ul style="list-style-type: none"> — Lead: < 5 mg/kg — Arsenic: < 3 mg/kg — Cadmium: < 1 mg/kg — Mercury: < 1 mg/kg 	
Conditions of use	Food category	Maximum level g/kg
	1. Dairy products and analogue	0,50
	4.2. Processed fruits and vegetables	0,30
	6.4.5. Fillings of stuffed pasta (ravioli and similar)	1,0
	7.1. Breads and rolls	0,60
	7.2. Fine bakery wares	0,60
	8. Meat	0,60

	9.2. Processed fish and fishery products including crustaceans and molluscs	0,60
	9.3. Fish roe	0,60
	12.2. Herbs, spices, seasonings	3,0
	12.5. Soups and broths	0,60
	12.6. Sauces	4,0
	12.7. Salads and savoury based sandwich spreads	1,0
	12.9. Protein products, excluding products covered in category 1.8	1,0
	15. Ready-to-eat savouries and snacks	3,0
Date from which the product is authorised	1 January 2014	
Date until which the product is authorised	1 January 2024	
Unique code	SF-004	
Name of the product	Scansmoke SEF 7525	
Name of the authorisation holder	Azelis Denmark A/S	
Address of the authorisation holder	Lundtoftegaardsvej 95 2800 Lyngby DENMARK	
Description and characterisation of the product	<p>1. Source materials: 35 % red oak (<i>Quercus rubra</i>), 35 % white oak (<i>Quercus alba</i>), 10 % maple (<i>Acer saccharum</i>), 10 % beech (<i>Fagus grandifolia</i>) and 10 % hickory (<i>Carya ovata</i>).</p> <p>2. Specifications: — Water: 0,3 – 0,9 wt. % — Acid (expressed as acetic acid): 0,09 – 0,25 meq/g — Carbonyl compounds: 1,2 – 3,0 wt. % — Phenols: 8 – 12 wt. %</p> <p>3. Purity criteria: — Lead: < 5,0 mg/kg — Arsenic: < 3,0 mg/kg — Cadmium: < 1,0 mg/kg — Mercury: < 1,0 mg/kg</p>	
Conditions of use	Food category	Maximum level g/kg
	1. Dairy products and analogue	0,16
	2. Fats and oils and fat and oil emulsions	0,05
	4.2. Processed fruits and vegetables	0,05
	5. Confectionery	0,08
	6. Cereals and cereal products	0,05
	7.1. Breads and rolls	0,08
	7.2. Fine bakery wares	0,08
	8. Meat	0,16

	9.2. Processed fish and fishery products including crustaceans and molluscs	0,16
	9.3. Fish roe	0,16
	10.2. Processed eggs and egg products	0,05
	12.2. Herbs, spices, seasonings	0,18
	12.5. Soups and broths	0,05
	12.6. Sauces	0,05
	12.7. Salads and savoury based sandwich spreads	0,05
	12.9. Protein products, excluding products covered in category 1.8	0,05
	14.1. Non-alcoholic beverages	0,05
	14.2. Alcoholic beverages, including alcohol-free and low-alcohol counterparts	0,05
	15. Ready-to-eat savouries and snacks	0,08
Date from which the product is authorised	1 January 2014	
Date until which the product is authorised	1 January 2024	
Unique code	SF-005	
Name of the product	SmokEz C-10	
Name of the authorisation holder	Red Arrow Products Company LLC	
Address of the authorisation holder	P.O. Box 1537 633 South 20th street Manitowoc, WI 54221- 1537 USA	
Description and characterisation of the product	<p>1. Source materials: Maple (<i>Acer saccharum</i>): 25 – 60 % Oak (<i>Quercus alba</i>): 10 – 40 % Hickory (<i>Carya ovata</i>): 10 – 25 % Ash (<i>Fraxinus americana</i>), birch (<i>Betula papyrifera</i> and <i>Betula alleghaniensis</i>), cherry (<i>Prunus serotina</i>), beech (<i>Fagus grandifolia</i>): 0 – 15 % (in total)</p> <p>2. Specifications: — pH: 2,15 – 2,6 — Water: 60,7 – 65,1 % — Acid % (expressed as acetic acid): 10,5 – 12,0 wt. % — Carbonyl compounds: 12,0 – 17,0 wt. % — Phenols: 10,0 – 15,0 mg/ml</p> <p>3. Purity criteria: — Lead: < 5,0 mg/kg — Arsenic: < 3,0 mg/kg — Cadmium: < 1,0 mg/kg — Mercury: < 1,0 mg/kg</p>	
Conditions of use	Food category	Maximum level g/kg
	1.7. Cheese and cheese products	0,20
	8.1.2. Meat preparations as defined by Regulation (EC) no 853/2004	2,5

	8.2. Processed meat	2,5
	9.2. Processed fish and fishery products including crustaceans and molluscs	2,0
	9.3. Fish roe	2,0
	12.2. Herbs, spices, seasoning and condiments	3,0
	12.6. Sauces and like products	3,0
	15. Ready-to-eat savouries and snacks	3,0
Date from which the product is authorised	1 January 2014	
Date until which the product is authorised	1 January 2024	
Unique code	SF-006	
Name of the product	SmokEz Enviro-23	
Name of the authorisation holder	Red Arrow Products Company LLC	
Address of the authorisation holder	P.O. Box 1537 633 South 20th street Manitowoc, WI 54221- 1537 USA	
Description and characterisation of the product	<p>1. Source materials: Maple (<i>Acer saccharum</i>): 25 – 65 % Oak (<i>Quercus alba</i>): 20 – 75 % Hickory (<i>Carya ovata</i>), ash (<i>Fraxinus americana</i>), birch (<i>Betula papyrifera</i> and <i>Betula alleghaniensis</i>), cherry (<i>Prunus serotina</i>), beech (<i>Fagus grandifolia</i>): 0 – 15 % (in total)</p> <p>2. Specifications: — pH: 2,8 – 3,2 — Water: 57,0 – 64,4 % — Acid % (expressed as acetic acid): 6,0 – 7,0 wt. % — Carbonyl compounds: 16,0 – 24,0 wt. % — Phenols: 10,0 – 16,0 mg/ml</p> <p>3. Purity criteria: — Lead: < 5,0 mg/kg — Arsenic: < 3,0 mg/kg — Cadmium: < 1,0 mg/kg — Mercury: < 1,0 mg/kg</p>	
Conditions of use	Food category	Maximum level g/kg
	1.7. Cheese and cheese products	2,0
	8.1.2. Meat preparations as defined by Regulation (EC) no 853/2004	5,0
	8.2. Processed meat	5,0
	9.2. Processed fish and fishery products including crustaceans and molluscs	2,0
	9.3. Fish roe	2,0
Date from which the product is authorised	1 January 2014	
Date until which the product is authorised	1 January 2024	

Unique code	SF-007	
Name of the product	Tradismoke™ A MAX	
Name of the authorisation holder	Nactis	
Address of the authorisation holder	36, rue Gutenberg – ZI La Marinière 91070 Bondoufle FRANCE	
Description and characterisation of the product	<p>1. Source materials: Beech (<i>Fagus grandifolia</i>)</p> <p>2. Specifications:</p> <ul style="list-style-type: none"> — pH: 1,5 – 2,5 — Water: 50 – 58 wt. % — Acid % (expressed as acetic acid): 13 – 16 wt. % — Carbonyl compounds: 17 – 22 wt. % — Phenols: 30 – 45 mg/ml <p>3. Purity criteria:</p> <ul style="list-style-type: none"> — Lead: < 5,0 mg/kg — Arsenic: < 3,0 mg/kg — Cadmium: < 1,0 mg/kg — Mercury: < 1,0 mg/kg 	
Conditions of use	Food category	Maximum level g/kg
	1.4. Flavoured fermented milk products including heat treated products	1,0
	1.6.3. Other creams	1,0
	1.7.3. Edible cheese rind	1,0
	1.7.5. Processed cheeses	1,0
	2. Fats and oils and fat and oil emulsions	1,0
	8.1.2. Meat preparations as defined by Regulation (EC) No 853/2004	4,0
	8.2. Processed meat	4,0
	9.2. Processed fish and fishery products including crustaceans and molluscs	4,0
	9.3. Fish roe	4,0
	12.2. Herbs, spices, seasonings	1,0
	12.5. Soups and broths	0,50
	12.6. Sauces	1,0
	14.1. Non-alcoholic beverages	0,10
	14.2. Alcoholic beverages, including alcohol-free and low-alcohol counterparts	0,10
15. Ready-to-eat savouries and snacks	1,0	
Date from which the product is authorised	1 January 2014	
Date until which the product is authorised	1 January 2024	

Unique code	SF-008	
Name of the product	proFagus-Smoke R709	
Name of the authorisation holder	ProFagus GmbH	
Address of the authorisation holder	Uslarer Strasse 30 37194 Bodenfelde GERMANY	
Description and characterisation of the product	<p>1. Source materials: 90 % beech (<i>Fagus sylvatica</i>), 10 % oak (<i>Quercus alba</i>)</p> <p>2. Specifications:</p> <ul style="list-style-type: none"> — pH: 2,0 – 2,5 — Water: 76,7 – 83,5 % — Acid (expressed as acetic acid): 10,5 – 12,5 meq/g — Carbonyl compounds: 5 – 10 wt. % — Phenols: 5 – 10 wt. % <p>3. Purity criteria:</p> <ul style="list-style-type: none"> — Lead: < 5,0 mg/kg — Arsenic: < 3,0 mg/kg — Cadmium: < 1,0 mg/kg — Mercury: < 1,0 mg/kg 	
Conditions of use	Food category	Maximum level g/kg
	1.7. Cheese and cheese products	2,5
	2. Fats and oils and fat and oil emulsions	0,002
	3. Edible ices	0,005
	4.2. Processed fruits and vegetables	0,55
	5. Confectionery	0,10
	8.1.2. Meat preparations as defined by Regulation (EC) No 853/2004	2,5
	8.2. Processed meat	2,5
	9.2. Processed fish and fishery products including crustaceans and molluscs	2,5
	9.3. Fish roe	2,5
	12.2. Herbs, spices, seasonings	4,0
	12.4. Mustard	0,10
	12.5. Soups and broths	0,28
	12.6. Sauces	1,5
	12.7. Salads and savoury based sandwich spreads	0,40
	14.1. Non-alcoholic beverages	0,10
14.2. Alcoholic beverages, including alcohol-free and low-alcohol counterparts	0,02	
15. Ready-to-eat savouries and snacks	2,5	
Date from which the product is authorised	1 January 2014	
Date until which the product is authorised	1 January 2024	

Unique code	SF-009	
Name of the product	Fumokomp	
Name of the authorisation holder	Kompozíció Kft	
Address of the authorisation holder	Kompozíció Kft 2053 Herceghalom HUNGARY	
Description and characterisation of the product	<p>1. Source materials: 85 % beech (<i>Fagus sylvatica</i>), 15 % hornbeam (<i>Carpinus betulus</i>)</p> <p>2. Specifications:</p> <ul style="list-style-type: none"> — Water content: < 2 w/w % — Acid % (expressed as acetic acid): 1 – 8 w/w % — Carbonyl compounds: 25 – 30 w/w % — Phenols: 15 – 60 w/w % <p>3. Purity criteria:</p> <ul style="list-style-type: none"> — Lead: < 5,0 mg/kg — Arsenic: < 3,0 mg/kg — Cadmium: < 1,0 mg/kg — Mercury: < 1,0 mg/kg 	
Conditions of use	Food category	Maximum level g/kg
	1.4. Flavoured fermented milk products including heat treated products	0,06
	1.6.3. Other creams	0,06
	1.7. Cheese and cheese products	0,06
	1.8. Dairy analogues, including beverage whiteners	0,06
	2. Fats and oils and fat and oil emulsions	0,06
	3. Edible ices	0,06
	4.2. Processed fruit and vegetables	0,06
	5. Confectionery	0,06
	6.3. Breakfast cereals	0,06
	6.4.5. Fillings of stuffed pasta (ravioli and similar)	0,06
	6.5. Noodles	0,06
	6.6. Batters	0,06
	6.7. Pre-cooked or processed cereals	0,06
	7.1. Breads and rolls	0,06
	7.2. Fine bakery wares	0,06
8. Meat	0,06	
9.2. Processed fish and fishery products including crustaceans and molluscs	0,06	
9.3. Fish roe	0,06	
10.2. Processed eggs and egg products	0,06	
12.2. Herbs, spices, seasonings	0,06	

	12.3. Vinegar	0,06
	12.4. Mustard	0,06
	12.5. Soups and broths	0,06
	12.6. Sauces	0,06
	12.7. Salads and savoury based sandwich spreads	0,06
	12.9. Protein products, excluding products covered in category 1.8	0,06
	13.3. Dietary foods for weight control diets intended to replace total daily food intake or an individual meal	0,06
	13.4. Foodstuffs suitable for people intolerant to gluten as defined by Regulation (EC) No 41/2009 ⁽¹⁾	0,06
	14.1.4. Flavoured drinks	0,06
	14.1.5.2. Other	0,06
	14.2. Alcoholic beverages, including alcohol-free and low-alcohol counterparts	0,06
	15. Ready-to-eat savouries and snacks	0,06
	16. Desserts excluding products covered in category 1, 3 and 4	0,06
Date from which the product is authorised	1 January 2014	
Date until which the product is authorised	1 January 2024	
⁽¹⁾ OJ L 16, 21.1.2009, p. 3.		
Unique code	SF-010	
Name of the product	AM 01	
Name of the authorisation holder	AROMARCO, s.r.o	
Address of the authorisation holder	Mlynská 15 929 01 Dunajská Streda SLOVAKIA	
Description and characterisation of the product	<ol style="list-style-type: none"> 1. Source materials: Beech (<i>Fagus sylvatica</i>) 2. Specifications: <ul style="list-style-type: none"> — Solvent: ethanol/water mixture (approx. 60/40 wt. %) — Acid (expressed as acetic acid): 3,5 – 5,2 g/kg — Carbonyl compounds: 6,0 – 10,0 g/kg — Phenols: 8,0 – 14,0 g/kg 3. Purity criteria: <ul style="list-style-type: none"> — Lead: < 5,0 mg/kg — Arsenic: < 3,0 mg/kg — Cadmium: < 1,0 mg/kg — Mercury: < 1,0 mg/kg 	

Conditions of use	Food category	Maximum level g/kg
	1.4. Flavoured fermented milk products including heat treated products	0,60
	1.6.3. Other creams	0,60
	1.7. Cheese and cheese products	0,60
	1.8. Dairy analogues, including beverage whiteners	0,60
	2. Fats and oils and fat and oil emulsions	0,40
	8.1.2. Meat preparations as defined by Regulation (EC) no 853/2004	0,85
	8.2. Processed meat	0,85
	9.2. Processed fish and fishery products including crustaceans and molluscs	0,80
	9.3. Fish roe	0,80
	14.2. Alcoholic beverages, including alcohol-free and low-alcohol counterparts	0,02
	15. Ready-to-eat savouries and snacks	1,30
Date from which the product is authorised	1 January 2014	
Date until which the product is authorised	1 January 2024	

COMMISSION REGULATION (EU) No 246/2014**of 13 March 2014****amending Annex I to Regulation (EC) No 1334/2008 of the European Parliament and of the Council
as regards removal from the Union list of certain flavouring substances****(Text with EEA relevance)**

THE EUROPEAN COMMISSION,

Regulation (EC) No 1331/2008, either on the initiative of the Commission or following an application submitted by a Member State or by an interested party.

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 1334/2008 of the European Parliament and of the Council of 16 December 2008 on flavourings and certain food ingredients with flavouring properties for use in and on foods and amending Council Regulation (EEC) No 1601/91, Regulations (EC) No 2232/96 and (EC) No 110/2008 and Directive 2000/13/EC ⁽¹⁾, and in particular Article 11(3) thereof,

- (4) Part A of the Union list contains a number of substances for which the European Food Safety Authority has not completed the evaluation or it has requested additional scientific data to be provided for completion of the evaluation. For 19 of those substances, the persons responsible for placing the flavouring substances on the market have now withdrawn their applications. Therefore, those flavouring substances should be removed from the Union list.

Having regard to Regulation (EC) No 1331/2008 of the European Parliament and of the Council of 16 December 2008 establishing a common authorisation procedure for food additives, food enzymes and food flavourings ⁽²⁾, and in particular Article 7(4) thereof,

- (5) Part A of Annex I to Regulation (EC) No 1334/2008 should therefore be amended accordingly.

Whereas:

- (6) Pursuant to Article 30 of Regulation (EC) No 1334/2008 flavouring substances not included in the Union list may be placed on the market as such and used in or on food until 22 October 2014. Since flavouring substances are already on the market in the Member States and in order to ensure smooth transition to a Union authorisation procedure, transitional measures have been laid down for food containing those substances in Commission Regulation (EU) No 873/2012 ⁽⁴⁾.

(1) Annex I to Regulation (EC) No 1334/2008 lays down a Union list of flavourings and source materials for use in food and their conditions of use.

(2) Commission Implementing Regulation (EU) No 872/2012 ⁽³⁾ has adopted the list of flavouring substances and has introduced that list in Part A of Annex I to Regulation (EC) No 1334/2008.

- (7) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on Food Chain and Animal Health,

(3) That list may be updated in accordance with the common procedure referred to in Article 3(1) of

HAS ADOPTED THIS REGULATION:

Article 1

Part A of Annex I to Regulation (EC) No 1334/2008 is amended in accordance with the Annex to this Regulation.

⁽¹⁾ OJ L 354, 31.12.2008, p. 34.

⁽²⁾ OJ L 354, 31.12.2008, p. 1.

⁽³⁾ Commission Implementing Regulation (EU) No 872/2012 of 1 October 2012 adopting the list of flavouring substances provided for by Regulation (EC) No 2232/96 of the European Parliament and of the Council, introducing it in Annex I to Regulation (EC) No 1334/2008 of the European Parliament and of the Council and repealing Commission Regulation (EC) No 1565/2000 and Commission Decision 1999/217/EC (OJ L 267, 2.10.2012, p. 1).

⁽⁴⁾ Commission Regulation (EU) No 873/2012 of 1 October 2012 on transitional measures concerning the Union list of flavourings and source materials set out in Annex I to Regulation (EC) No 1334/2008 of the European Parliament and of the Council (OJ L 267, 2.10.2012, p. 162).

Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 13 March 2014.

For the Commission
The President
José Manuel BARROSO

ANNEX

In Part A of Annex I to Regulation (EC) No 1334/2008, the following entries are deleted:

01.015	Vinylbenzene	100-42-5		11022			1	EFSA
02.122	p-Mentha-1,8(10)-dien-9-ol	3269-90-7					2	EFSA
09.809	p-Mentha-1,8(10)-dien-9-yl acetate	15111-97-4		10743			2	EFSA
12.114	Diethyl trisulfide	3600-24-6	1701	11451			4	EFSA
12.120	2,8-Epithio-p-menthane	68398-18-5	1685				4	EFSA
12.159	Methyl methanethiosulfonate	2949-92-0		11520			3	EFSA
12.256	Ethyl propyl trisulfide	31499-70-4	1695				4	EFSA
12.272	Propyl propanethiosulfonate	1113-13-9	1702				3	EFSA
13.029	2,5-Dimethylfuran	625-86-5	1488	2208			3	EFSA
13.030	2-Methylfuran	534-22-5	1487	2209			3	EFSA
13.092	2-Ethylfuran	3208-16-0	1489	11706			3	EFSA
14.145	Pyrrole-2-carbaldehyde	1003-29-8		11393			4	EFSA
14.163	1-Methylpyrrole-2-carboxaldehyde	1192-58-1					4	EFSA
14.169	1-Ethyl-2-pyrrolicarboxaldehyde	2167-14-8					4	EFSA
15.064	2,5-Dimethylthiophene	638-02-8					4	EFSA
15.072	2-Ethylthiophene	872-55-9		11614			4	EFSA
15.091	2-Methylthiophene	554-14-3		11631			4	EFSA
15.092	3-Methylthiophene	616-44-4		11632			4	EFSA
16.124	(1R,2S,5R)-N-cyclopropyl-5-methyl-2-isopropyl cyclohexanecarboxamide	73435-61-7					1	EFSA'



EFFA Guidance Document on the EC Regulation on Flavourings - V3.0 (11/03/13)

EFFA Guidance Document on the EC Regulation on Flavourings

General Introduction

On 8 July 2008 the European Parliament (EP) voted for the FIAP (Food Improvement Agents Package) which includes a Regulation on Flavourings. The new EC Regulation on Flavourings¹ (hereinafter referred to as the “Regulation”) was published on 31 December 2008. The Regulation entered into force on 20 January 2009 and most sections, with the exception of Art. 10 and Annex I, have been applicable since 20 January 2011.

EFFA (European Flavour Association) welcomes this review and the updating of the European flavourings legislation.

With **IL FL/09/01** EFFA distributed a document summarizing the major changes introduced through the new Regulation (See **Attachment I** to this Guidance Document).

The current EFFA Guidance Document further elaborates on the changes introduced through the new Regulation and seeks to establish EU wide guidance on the practical application of the new Regulation. It is intended to harmonise the interpretation of the Regulation within the EU Flavour Industry. It is hoped that this guidance will serve as a reference for operators and enforcement authorities.

EFFA underlines that producers of flavourings have the responsibility to produce and place on the market safe flavourings.² Certain flavourings must, therefore, undergo a risk assessment before they can be permitted in food. Furthermore, their use must not mislead the consumer and their presence in food should, therefore, always be indicated by appropriate labelling.³

¹ REGULATION (EC) No 1334/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on flavourings and certain food ingredients with flavouring properties for use in and on foods and amending Council Regulation (EEC) No 1601/91, Regulations (EC) No 2232/96 and (EC) No 110/2008 and Directive 2000/13/EC – OJ L 354, 31.12.2008, p. 34.

² See Chapter I and II of this Guidance Document and also the General Food Law: Regulation (EC) No 178/2002.

³ See Recital (7) of the Regulation.

This Guidance Document is built up of six Chapters following the Chapters of the Regulation:

1. Chapter I Subject Matter, Scope and Definitions
2. Chapter II Conditions of Use
3. Chapter III Union List⁴
4. Chapter IV Labelling of flavourings
5. Chapter V Procedural Provisions and Implementation – Reporting and Monitoring
6. Chapter VI Transitional and final Provisions – Entry into force and application.

Several attachments have been added to the present Guidance Document in order to provide some examples or in order to clarify the interpretations expressed in the Guidance Document.

Disclaimer

Important Legal Notice:

The present Guidance Document on the Regulation has been produced by EFFA solely with the aim of providing informal guidance. It should be read in conjunction with the relevant legislation, being understood that only European Union legislation published in paper editions of the Official Journal of the European Union is deemed authentic. The guidance given by EFFA should not be used as a substitute for legal advice and should not be considered as an authoritative interpretation of the law, as only the European courts have the power to interpret statutory provisions.

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Attachment I: EFFA IL/09/01

⁴ This list is in the Regulation still referred to as “**Community List**” but this name is no longer used. As a consequence of the Lisbon Treaty, the correct reference is “**Union List**”. Lisbon treaty: <http://eur-lex.europa.eu/JOHtml.do?uri=OJ:C:2007:306:SOM:EN:HTML>

Chapter I (Articles 1 and 2)

Subject Matter and Scope

1. Article 1 – Subject Matter of the Regulation

- Extended Scope

According to Article 1 the Regulation aims at laying down rules on **flavourings** (as defined in Article 3.2 (a) of the Regulation) and **food ingredients with flavouring properties** (as defined in Article 3.2 (i) of the Regulation) for use in and on foods. Thus, contrary to Directive 88/388/EEC⁵ which restricted its scope to flavourings, the Regulation extends its scope to certain food ingredients with flavouring properties.⁶

- Policy objectives

The Regulation aims at achieving 5 complementary policy objectives,⁷ of which **consumer health** and **consumer interests** appear to be the core objectives. Recital (7) of the Regulation emphasizes the importance of both the **appropriate labelling** (consumer interest) and the **risk assessment** (consumer health), whilst insisting that **other legitimate factors** (*inter alia* societal, economic, ethical or environmental factors), as well as the precautionary principle, should also be taken into account when approving flavourings.

- Regulatory framework

The Regulation provides for three regulatory tools aiming at achieving the policy objectives indicated above, i.e. (a) a **Community List** (now referred to as “**Union list**”) of flavourings and source materials approved for use in and on foods,⁸ (b) a set of **specific conditions of use** for flavourings and food ingredients with flavouring properties in and on foods,⁹ and (c) specific **rules on the labelling** of flavourings.¹⁰

⁵ See OJ L 184, 15.7.1988, p.61.

⁶ In its Explanatory Memorandum (See COM(2006) 427 final, 28.07.2006) the European Commission clarified that due to diverging practices of the Member States regarding the application of maximum levels for undesirable substances (either application of the maximum levels to food containing only flavourings or application of the maximum levels to food containing both flavourings and food ingredients with flavouring properties) a harmonized approach should be reached through the extension of the scope. See also p. 5 of the Explanatory Memorandum, “*Clarification of the Scope*”.

⁷ The 5 policy objectives are: a) ensuring an effective functioning of the internal market, b) ensuring a high level of human health protection, c) protecting consumer interests, d) ensuring fair practices in food trade and e) protecting the environment.

⁸ See Chapter III of the Regulation (Articles 9–13) and Annex I of the Regulation and Chapter III of this Guidance Document.

⁹ See Chapter II of the Regulation (Articles 4-8) and Chapter II of this Guidance Document.

¹⁰ See Chapter IV of the Regulation (Articles 14-18, especially Article 16 laying down the conditions for the use of the term “natural”) and Chapter IV of this Guidance Document.

2. Article 2 – The Scope of the Regulation

Article 2 of the Regulation defines the scope both positively and negatively, i.e. it provides a list¹¹ of items falling under its scope as well as a list¹² of items to which the Regulation does not apply.

- The Regulation covers:¹³
 - **flavourings** (as defined Article 3.2 (a) of the Regulation) which are used or intended to be used in or on foods;¹⁴
 - **food ingredients with flavouring properties** (as defined in Article 3.2 (i) of the Regulation);
 - **food** containing flavouring and/or food ingredients with flavouring properties;
 - **source materials** (as defined in Article 3.2 (j) of the Regulation) for flavourings and/or source materials for food ingredients with flavouring properties.
- The Regulation does not cover:¹⁵
 - **substances which have exclusively a sweet, sour or salty taste**, such as all sugars, sweeteners, salt (sodium chloride), citric acid;
 - **raw foods**;¹⁶
 - **non-compound foods and mixtures** such as, but not exclusively, fresh, dried or frozen spices and/or herbs, mixtures of tea and mixtures for infusion as such, **as long as they have not been used as food ingredients**, e.g. cinnamon sticks, cherry juice.

¹¹ See Article 2.1 of the Regulation.

¹² See Article 2.2 of the Regulation.

¹³ See also Recital (5) of the Regulation clarifying the scope of the Regulation.

¹⁴ It should be noted that “smoke flavourings” (as defined in Article 3.2 (f) of the Regulation) are also subject to the more specific rules laid down in Regulation (EC) No 2065/2003 (See OJ L 309, 26.11.2003, p.1).

¹⁵ See also Recital (6) of the Regulation clarifying the scope of the Regulation.

¹⁶ According to Recital (6), “raw foodstuffs” are products not having undergone any processing treatment.

Chapter I (Article 3)

Definitions

1. Introduction

Flavourings are used to impart or modify the odour and/or taste of foods.¹⁷ Flavourings may contain food additives as permitted by Regulation (EC) No. 1333/2008¹⁸ and/or other food ingredients incorporated for technological purposes.¹⁹

Flavourings are not intended to be consumed as such.

The general safety obligations/requirements as expressed in Art. 4 apply to all flavourings irrespective the category to which they belong. In addition, all flavourings have to comply with the general food law (Regulation (EC) No 178/2002)²⁰.

Flavouring components, as mentioned in Article 16, Article 29 and in Recital (26) are considered to be the different categories of flavourings as described in Article 3.2. (b) – (h). With respect to certain categories of flavourings and corresponding definitions EFFA provides further guidance below.

Only flavourings containing in their flavouring part solely “natural flavouring substances” as defined in Article 3.2 (c) and/or “flavouring preparations” as defined in Article 3.2 (d) can be labelled with the term “natural”.²¹

With Information Letter **IL FL/10/02** EFFA published the “Guidance Document for the Production of Natural Flavouring Substances and (Natural) Flavouring Preparations in the EU” (See **Attachment IIa&b** to this Guidance Document) to bring clarifications that provide a consistent interpretation of what constitutes a natural process under the new Regulation. This Chapter takes into account the recommendations described in this Guidance Document.

2. Flavouring substance (Article 3.2 (b))

The category “flavouring substance” comprises all 3 categories referred to in Directive 88/388/EEC, i.e. natural flavouring substances, nature-identical flavouring substances and artificial flavouring substances.²² The denominations “nature-identical” and “artificial” (and the distinction between them) no longer exist.

¹⁷ See Article 3.2 (a) (i) of the Regulation.

¹⁸ See Regulation (EC) No. 1333/2008/EC, OJ L 354, 31.12.2008, p. 16.

¹⁹ See Article 3.4 of the Regulation.

²⁰ Regulation (EC) No 178/2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety

²¹ See Article 16.2 of the Regulation and Chapter IV of this Guidance Document.

²² See Article 1.2 (b) and Article 9.1 (d) of Directive 88/388/EEC on the approximation of the laws of the Member States relating to flavourings for use in foodstuffs and to source materials for their production, OJ L 184, 15.7.1988, p. 61.

A flavouring substance is obtained from materials of vegetable, animal, microbiological or mineral origin. For 'natural flavouring substances' more specific rules²³ apply (See Section 3 below).

Ammonium, sodium, potassium and calcium salts as well as chlorides, carbonates and sulphates are covered by the generic substances, providing that they have flavouring properties.²⁴

3. Natural flavouring substance (Article 3.2 (c))

A flavouring substance is considered to be 'natural' when it is obtained from material of vegetable, animal or microbiological origin, by natural processes, **and** has been "identified in nature".

"Identified in nature" means:

- identified in materials of plant, animal, microbiological, or mineral origin,²⁵ and/or
- identified in food in the raw state or processed or partly processed for human consumption and
- meeting the criteria for the validity of identifications in nature as further described in the attachment to IOFI Information Letter 1333 (*Flavour Fragr. J.*, 2006, **21**: 185), and where necessary in specific IOFI guidelines for using the technique of LC-MS for identifications.²⁶

Substances which do not meet the above-mentioned requirements shall not be considered as being natural.

4. Flavouring preparation (Article 3.2 (d))

According to Article 3.2 (d) of the Regulation "flavouring preparations" are products other than chemically defined substances which meet the definition of flavouring materials and which are obtained from food or other material of vegetable, animal or microbiological origin by appropriate physical processes or enzymatic or microbiological processes either in the raw state of the material thus derived or after further processing for human consumption by one or more of the traditional food preparation processes listed in Annex II.²⁷

²³ See Article 3.2 (c) of the Regulation.

²⁴ See Note 1 to Section 2 of Annex (Union List Part A) to Commission Implementing Regulation adopting the list of flavouring substances (Regulation (EU) No 872/2012).

²⁵ "Identified in nature", should not be confused with "recognised as a source material" for the production of natural flavouring substances or flavouring preparations, e.g. mineral origin (should not be regarded as a source material). This topic is covered in the definition of source material (Paragraph 8 of this Chapter).

²⁶ IOFI (WGMA), *Flavour Fragr. J.* 2010, 25, 2-3.

²⁷ See Article 3.2 (d) of the Regulation. Please also refer to Recital (15) of the Regulation.

ISO Standard 9235 gives some examples of different flavouring preparations such as essential oils, extracts and tinctures.²⁸

Article 3.2 (d) makes a distinction between flavouring preparations that are made from foods and those that are made from non-foods (a distinction that becomes an important factor in deciding whether the flavouring preparation shall be subject to special evaluation and authorization prior to use).²⁹

Contrary to the definition under Directive 88/388 Article 3.2 (d) of the Regulation does not include the words “whether concentrated or not”.³⁰ EFFA understands that the concentration of the flavouring preparation is thus irrelevant, like under the previous directive.³¹

Due to the way they are produced flavouring preparations are complex mixtures containing more than volatile flavouring molecules. Therefore the presence of constituents that are naturally present in the flavouring preparation due to their presence in the source materials, e.g. intrinsic fruit water, as well as foods / food ingredients used during the manufacturing process, e.g. ethanol, edible oil, acetic acid, can be considered as part of the flavouring preparation.

Flavouring preparations must be produced by appropriate processes as indicated in Article 3.2 (d) – i.e. in line with the traditional processes listed in Annex II – and Article 3.2 (k), and in accordance with GMP so as to not mislead the consumers.

5. Thermal process flavouring (Article 3.2 (e))

A thermal process flavouring is obtained as a result of intentionally heating a blend of an amino containing ingredient (nitrogen source) and a reducing sugar.

Examples of nitrogen sources include amino acids and their salts, peptides, proteins from foods, hydrolysis products of those proteins. Reducing sugars are e.g. dextrose/glucose, xylose.

The process conditions applied to such mixtures are described in Annex V of the Regulation and are not part of the definition. It should be underlined that any thermal process flavouring not produced according to the conditions for the production as specified in Annex V needs specific evaluation and authorization.³²

As shown in Figure 1 for all Time/Temperature conditions above the red line, the Thermal Process Flavouring has to be evaluated.

It is the responsibility of the flavouring producing company to judge whether or not the conditions used in their production are compliant with the conditions set out in Annex V.

²⁸ International Organization for Standardization (ISO): International Standard 9235 – Aromatic natural raw materials – Vocabulary. ISO 1997©.

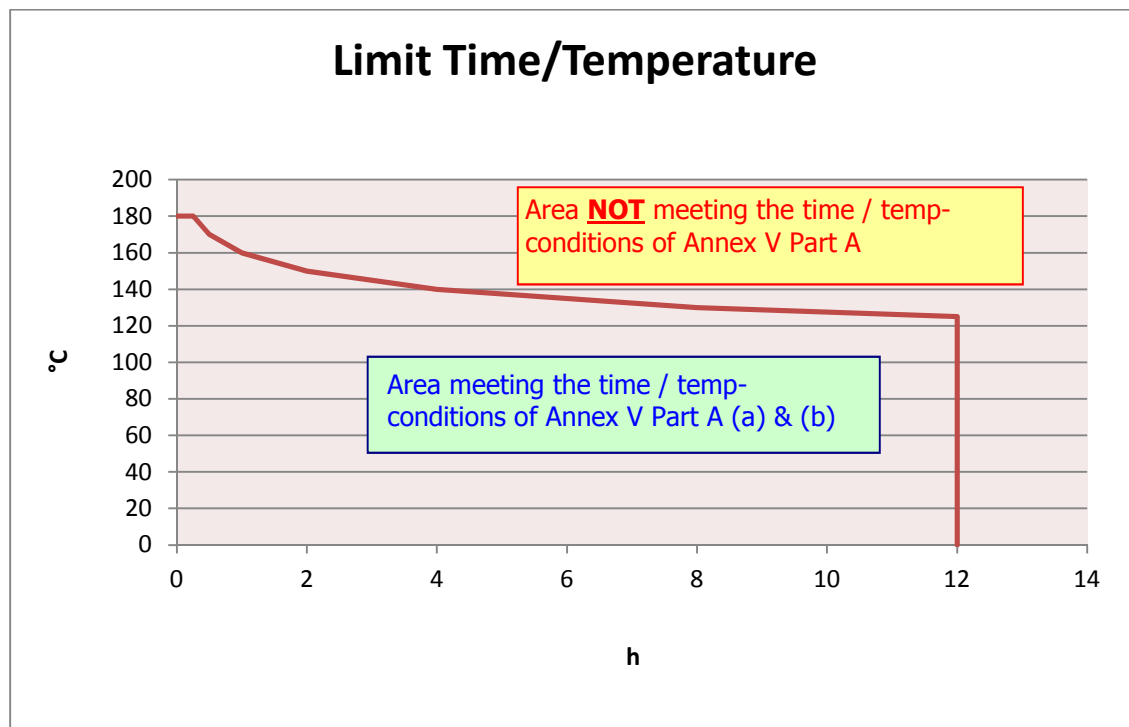
²⁹ See Article 8 and Article 9 (b) of the Regulation and Chapter III of this Guidance Document

³⁰ See Article 1.2 (c) of Directive 88/388/EEC.

³¹ See also explanation in DG SANCO Working Document WGF/002/02, (2002) which reads as follows: ‘flavouring preparation’ means a product obtained from materials of vegetable or animal origin, resulting normally in complex flavouring mixtures, e.g. extract of vanillin capsules which contains besides vanillin more than 100 additional substances, many at very low concentrations, or essential oils from citrus fruits, peppermint or spices, or distillates from fruits, vegetables, herbs or spices..

³² See Article 9 (c) of the Regulation.

Figure 1: Time/Temperature Chart for production of Thermal Process Flavourings and differentiation between area not meeting the conditions of Annex V Part A versus area meeting those conditions



6. Smoke flavouring (Article 3.2 (f))

Smoke flavourings are regulated by Regulation (EC) No 2065/2003.³³

The following products fall under the definition of a ‘smoke flavouring’:

1. ‘primary smoke condensate’ shall refer to the purified water-based part of condensed smoke and shall fall within the definition of ‘smoke flavourings’;
2. ‘primary tar fraction’ shall refer to the purified fraction of the water-insoluble high-density tar phase of condensed smoke and shall fall within the definition of ‘smoke flavourings’;
3. ‘primary products’ shall refer to primary smoke condensates and primary tar fractions;
4. ‘derived smoke flavourings’ shall refer to flavourings produced as a result of the further processing of primary products and which are used or intended to be used in or on foods in order to impart smoke flavour to those foods.

The Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF) of EFSA has now completed the review of the safety of 10 Primary Products used in the European Union. Based on these safety evaluations, the European Commission will establish a list of Primary Products which are authorised to be used in or on foods. Only listed materials will be allowed to be used under the conditions specified after a transitional period.

³³ OJ L 309, 26.11.2003, p. 1.

7. Flavour precursor (Article 3.2 (g))

Flavour precursors are products that do not necessarily have flavouring properties themselves but are **intentionally** added to food for the purpose of producing flavour by breaking down / reacting with other components during processing of the food.

When flavour precursors are obtained from **food** they do not need to be evaluated and approved.

Examples of flavour precursors include:

- Carbohydrates, oligopeptides and amino acids.

Precursors can be single substances or mixtures. Some flavour precursors can belong to more than one flavouring category depending on their intended use: for example some amino acids can be used as flavour precursors but if they are listed on the UL of Flavouring Substances (Part A of UL), they may also be used for this purpose.

8. Other flavouring (Article 3.2 (h))

In cases where a flavouring material does not fit the definition of flavouring substances, flavouring preparations, thermal process flavourings, smoke flavourings or flavour precursors, it is automatically classified as 'other flavouring'.

Other flavourings always require an evaluation and approval.³⁴ As mentioned in the Introduction flavourings containing in their flavouring part "other flavourings" can never be labelled with the term "natural".

Rum ether is regarded as an example of a product which falls into the category of "other flavourings".

9. Source material (Article 3.2 (j))

Source material shall mean material of vegetable, animal, microbiological or mineral origin from which flavourings or food ingredients with flavouring properties are produced. Source materials can be food or non food.³⁵

According to Regulation 178/2002/EC,³⁶ food is considered as any substance or product, whether processed, partially processed or unprocessed, intended to be, or reasonably expected to be ingested by humans.³⁷ Materials of vegetable, animal, microbiological and mineral origin for which it can sufficiently be demonstrated that they have been used for the production of flavourings are also considered to be food in this

³⁴ See Article 9 (e) of the Regulation and Chapter III of this Guidance Document.

³⁵ See Article 3.2 (j) of the Regulation.

³⁶ See Article 2 of Regulation (EC) No 178/2002 ("General Food Law") OJ L 31, 1.2.2002, p. 1.

³⁷ This includes sources amongst others those mentioned in Fenaroli's Handbook of Flavor Ingredients (5th Ed., volume I) by CRC Press Inc, Boca Raton, FL 2005; Natural Sources of Flavourings, Council of Europe, 2008, 2007 & 2000; CFR, Title 21, parts 172.510, 182 and 184; Tanaka's Encyclopedia of Edible Plants of the World, Tyôzaburô, Tanaka Keigaku Publishing co, Tokyo, 1976.

context.³⁸ This is considered to take account of materials used anywhere worldwide³⁹ for these purposes prior to the date of application of the Regulation.⁴⁰

Any other material will be considered as non-food and will have to be evaluated when used as a source material for flavouring preparations, thermal process flavourings or flavour precursors in accordance with the Regulation.⁴¹

Source materials listed in Part A of Annex IV⁴² shall not be used for the production of flavourings and/or food ingredients with flavouring properties. The restriction on the use of certain source materials is covered by Chapter II of this Guidance Document.⁴³

Attachment II: a) EFFA IL/10/02 & b) “Guidance Document for the Production of Natural Flavouring Substances and (Natural) Flavouring Preparations in the EU” V2.0

³⁸ See Article 3.3 of the Regulation. Please also refer to Recital (16) of the Regulation.

³⁹ No restriction is made in the Regulation limiting this only to the European Union.

⁴⁰ The 20 January 2011 is the date of application of the Regulation.

⁴¹ See Article 9 of the Regulation.

⁴² Tetraploid form of *Acorus calamus* L.

⁴³ See Article 7 of the Regulation and Chapter II of this Guidance Document.

Chapter II (Articles 4–7)

Conditions for Use of Flavourings, Food Ingredients with Flavouring Properties and Source Materials

1. Introduction

Since 1999, the Scientific Committee on Food (SCF) and subsequently the European Food Safety Authority (EFSA)⁴⁴ have expressed respective opinions on a number of substances occurring naturally in source materials for flavourings and food ingredients with flavouring properties, e.g. some herbs, spices. According to the Committee of Experts on Flavouring Substances of the Council of Europe (CoE)^{45,46}, these substances may raise toxicological concern. Although these substances have in the past commonly been referred to within the food industry as "Biologically Active Principles" (so-called "BAPs") they will be referred to as "Restricted Substances" (RS) in this Guidance Document. The Regulation uses the undefined term "certain substances".

2. The new Regulation

With reference to the Regulation, substances for which toxicological concern was confirmed by SCF/EFSA should be regarded as naturally occurring undesirable substances which should not be added as such to food.⁴⁷ Due to their natural occurrence, these substances might be present in flavourings and certain food ingredients with flavouring properties.⁴⁸

2.1. Scope⁴⁹

The Regulation clarifies in its title that it also covers certain food ingredients with flavouring properties. These are defined as food ingredients other than flavourings which may be added to food for the main purpose of adding flavour to it or modifying its flavour and which contribute significantly to the presence in food of certain naturally occurring undesirable substances.⁵⁰

Consequently Annex III part B of the Regulation refers to maximum levels of "RS", naturally present in flavourings and food ingredients with flavouring properties, in certain compound food as consumed to which flavourings and/or food ingredients with flavouring properties have been added.

⁴⁴ Panel on Food Additives, Flavourings, Processing aids and Flavourings and Materials in Contact with Food (AFC) and since July 2008 the EFSA Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

⁴⁵ Within CoE a Committee of Experts on Flavouring Substances has evaluated the safety-in-use of natural flavouring source materials since 1970. The results are published in the "Blue Book" – Flavouring Substances and Natural Sources of Flavourings, Council of Europe.

⁴⁶ According to CoE "active principles" are chemically defined substances which occur in certain natural flavouring source materials and preparations and which, on the basis of existing toxicological data, should not be used as flavouring substances in their own right. Source: Active principles (constituents of toxicological concern) contained in natural sources of flavourings – approved by the Committee of Experts on Flavouring Substances, October 2005.

⁴⁷ See Recital (8) of the Regulation.

⁴⁸ See Recital (9) of the Regulation.

⁴⁹ See also Chapter I of this Guidance Document under Scope.

⁵⁰ See Article 3.2 (i) of the Regulation.

2.2. Risk management for Annex III - substances

2.2.1 General conditions

Only flavourings or food ingredients with flavouring properties which meet the following conditions may be used in or on foods:

- they do not, on the basis of the scientific evidence available, pose a safety risk to the health of the consumer and
- their use does not mislead the consumer.⁵¹

Products (flavourings and/or food) which do not comply with this Regulation are prohibited.⁵²

2.2.2 Annex III part A – list of substances which shall not be added as such to food

A list of 15 substances which should not be added as such to foods (including flavourings and food ingredients with flavouring properties) is provided in Annex III part A (those substances which are also subject to maximum levels in Annex III part B are indicated in bold – see 2.2.3).⁵³

- Agaric acid
- Aloin
- **Beta-asarone**
- Capsaicin (new)
- **Coumarin**
- **Estragole** (new)
- **Hydrocyanic acid**
- Hypericine
- **Menthofuran** (new)
- **Methyleugenol** (new)
- **Pulegone**
- **Quassin**
- **Safrole**⁵⁴
- **Teucrin A** (new)
- **Thujone (alpha and beta)**.

According to the first principle of HACCP (Hazard Analysis and Critical Control Point) as laid down in Regulation 852/2004/EC,⁵⁵ the flavour manufacturers shall put in place suitable procedures in order to identify any hazard that must be prevented, eliminated or reduced to acceptable levels.

Substances which are not listed in Annex III part B as well and hence which are not subject to maximum levels in specified applications, are not regarded as a hazard. Therefore their potential presence in flavourings and/or their source materials is usually not controlled on a routine basis by flavour manufacturers.

⁵¹ See Article 4 of the Regulation.

⁵² See Article 5 of the Regulation.

⁵³ Nota bene: Berberin and santonin are no longer mentioned in this list.

⁵⁴ According to the SCF opinion, "any measure to restrict exposure to safrole in food would also cover isosafrole". SCF Opinion on isosafrole, expressed on 4 April 2003 (SCF/CS/FLAV/FLAVOUR/30 Final).

⁵⁵ See Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs, OJ L 139, 30.4.2004, p. 1.

Recommendation:

Flavour producers commit themselves to control the potential presence of ANNEX III A substances in flavourings in case these substances are also listed in Annex III part B and hence subject to maximum limits in specified applications. In the Quality Assurance System of flavour producers, these substances should be identified.

2.2.3 Annex III part B – maximum levels of certain substances

The risk management of certain substances naturally present in certain food ingredients with flavouring properties and/or flavourings is based upon the “major contributor approach”, i. e.:

Maximum levels⁵⁶ are established for the presence of these undesirable substances in foods which are presumed to contribute most to the human intake of these substances, taking into account both the need to protect human health and their unavoidable presence in traditional foods.⁵⁷

- Maximum levels for certain naturally occurring undesirable substances should focus on the food or food categories which contribute most to dietary intake.⁵⁸
- Only food ingredients with flavouring properties contributing significantly to the presence in food of certain naturally occurring undesirable substances are considered.⁵⁹

For those foodstuffs not listed in this Annex, the general rules for safety apply.⁶⁰

Annex III part B sets maximum levels for the following 11 substances:⁶¹

- β -Asarone
- Coumarin
- Estragole (new)
- Hydrocyanic acid
- Menthofuran (new)
- Methyleugenol (new)
- Pulegone
- Quassin
- Safrole⁵⁴
- Teucrin A (new)
- Thujone (α & β).

The maximum levels of these substances shall apply to foods as marketed, unless otherwise stated. By way of derogation from this principle, for dried and/or concentrated foods which need to be reconstituted, the maximum levels shall apply to the food as reconstituted according to the instructions on the label, taking into account the minimum dilution factor.⁶²

⁵⁶ The maximum levels shall not apply to estragole, methyleugenol and safrole where a compound food contains no added flavourings and the only food ingredients with flavouring properties that have been added are fresh, dried or frozen herbs and spices; however, other flavourings which do not contribute to the presence of these three substances may be used (Letter from the European Commission to ESA of 16 March 2009).

⁵⁷ See Recital (9) of the Regulation.

⁵⁸ See Recital (10) of the Regulation.

⁵⁹ See Article 3.2 (i) of the Regulation.

⁶⁰ See Article 14 of EC Regulation 178/2002 – EC Basis Regulation on Food Law.

⁶¹ No maximum levels are set anymore for agaric acid, aloin, berberin, hypericine and santonin; however with reference to agaric acid and hypericine Annex IV has to be taken into account.

⁶² See Article 6.2 of the Regulation.

Recommendation:

Flavour producers commit themselves to communicate to the customer any relevant “RS” levels in flavourings irrespective of the intended use of the flavourings, even if the flavoured food is not covered by any food category mentioned in Annex III B.

2.2.4 Monitoring and Reporting by Member States⁶³

Member States shall establish systems to monitor the consumption of “RS” listed in Annex III on a risk-based approach, and shall report their findings with appropriate frequency to the Commission and to EFSA. A common methodology for gathering the data had to be adopted by 20 January 2011 (Working Document not yet available).⁶⁴

Recommendation:

Flavour producers commit themselves to communicate to the Commission and Member States respectively all relevant data as needed.

2.2.5 Annex IV – List of source materials to which restrictions apply

Provisions should be established at Community level in order to prohibit or restrict the use of certain plant, animal, microbiological or mineral materials raising concern for human health in the production of flavourings and food ingredients with flavouring properties and their application in food production.⁶⁵

Source materials listed in Part A of Annex IV shall not be used for the production of flavourings and/or food ingredients with flavouring properties.⁶⁶ For the time being there is only one source material listed: Tetraploid form of *Acorus calamus* L.⁶⁷

Recommendation:

Flavour producers should ask for confirmation about the absence of tetraploid form of *Acorus calamus* L. in calamus oil. The “Restricted Substance” in calamus oil is beta-asarone.

Flavourings and/or food ingredients with flavouring properties produced from source materials listed in Part B of Annex IV may be used only under the conditions indicated in that Annex.⁶⁸ These source materials are (common names):

- Quassia for beverages and bakery wares (the limits for quassin still apply)
- White agaric mushroom for alcoholic beverages
- St. John’s wort for alcoholic beverages

⁶³ See also Chapter V of this Guidance Document (Monitoring).

⁶⁴ See Article 20 of the Regulation.

⁶⁵ See Recital (11) of the Regulation.

⁶⁶ See Article 7.1 of the Regulation.

⁶⁷ Article 22 allows amendments to Annexes II to V (see Chapter VI of this EFFA Guidance).

⁶⁸ See Article 7.2 of the Regulation.

- Wall germander for alcoholic beverages (the limits for teucrin A still apply)

2.2.6 Recommended analytical methods/criteria

The Working Group on Methods of Analysis (WGMA) of IOFI published a number of methods in the 70s and 80s for the determination of many of the Annex III restricted substances in beverages and foodstuffs. However, most of these methods are now considered as obsolete by the WGMA, with the possible exception of the last group⁶⁹ for which a satisfactory validation study was performed for safrole and pulegone.

In addition, a decision was adopted within the WGMA in 2002 to limit recommendations and criteria for methods of analysis for these restricted substances to the actual flavourings, rather than to attempt proposing methods for their determinations in finished foods. While any methodology for flavourings could potentially be adapted for application to beverages, and even other food products which can be rendered in a homogenous liquid form without possible interference from the matrices, this is a matter for the end-user of the flavourings.

In recent years the WGMA has focussed on guidelines for different analytical approaches for the analysis of flavourings, such as qualitative and quantitative capillary GC, GC/MS with selected-ion monitoring (SIM)⁷⁰, etc. The latter approach is particularly important in the context of the Annex III restricted substances, since it has become essential to ensure that the identification of these substances is confirmed by another method, particularly when present at low levels in a complex matrix.

With this in mind, the WGMA has developed a “multi-residue” approach for the volatile substances of Annex III, with the exception of hydrocyanic acid, for which classical wet-chemistry methodology or ion chromatography needs to be used.^{71,72} This approach uses GC/MS with selected-ion monitoring, which enables the simultaneous quantification and unequivocal identification of the relevant compounds to be made, and has been applied successfully in the analogous situation of the quantification of suspected volatile allergens in fragrances.⁷³ This draft methodology for the Annex III restricted substances has undergone evaluation in several flavouring-industry laboratories, and the final version of an IOFI Recommended Method for GC-MS determination of Restricted Substances in flavourings and raw materials is expected to be approved for publication shortly.

The two remaining restricted (non-volatile) substances listed in Annex III are quassin and teucrin A. Both of these originate from single botanical sources and occur less frequently in flavourings; a few methods using HPLC have been published,^{74,75,76,77} and will be evaluated by the WGMA in the near future.

⁶⁹ IOFI (WGMA), *Z. Lebensm. Unters. Forsch.*, **186**, 36-38 (1988).

⁷⁰ IOFI (WGMA), *Flavour Fragr. J.* 2012, **27**, 224–226

⁷¹ Salagoity *et al.*, *Ann. Falsif. Exp. Chim. Tox.*, **95** (958), 71-77 (2002).

⁷² Scotter *et al.*, http://www.foodbase.org.uk/admintools/reportdocuments/528-1-1227_A01067_Annex_III_Cyanogens_SOPx.pdf

⁷³ Bassereau *et al.*, *J. Agric. Food Chem.*, **55**, 25-31 (2007).

⁷⁴ Vitanyi *et al.*, *Rapid communications in Mass Spectrometry*, **11**, 691-693 (1997).

⁷⁵ Bosisio *et al.*, *Food Additives and Contaminants*, **21** (5), 407-414 (2004).

⁷⁶ Lander *et al.*, *Z. Lebensm. Unters. Forsch.*, **190**, 410-413 (1990)

⁷⁷ Scotter *et al.*, http://www.foodbase.org.uk/admintools/reportdocuments/528-1-1226_A01067_Annex_II_Coumarin_SOPx.pdf

Chapter III (Articles 9–12)

Union List

This Chapter relates to the **Union List of Flavourings and Source Materials Approved for Use in or on Foods**.⁷⁸

In the Regulation this list is still referred to as “**Community List**” but this name is no longer used. As a consequence of the Lisbon Treaty,⁷⁹ the correct reference is “**Union List**”.

Chapter III lays down the provisions for the inclusion of flavourings and source materials approved for use in or on foods in the Union List and defines for which flavourings and source materials an approval is required.

The Union List of flavourings and source materials approved for use in and on foods will be added to Annex I of the Regulation in a stepwise approach. The first stage was the introduction of the List of flavouring substances provided for by Regulation (EC) No 2232/96 (Part A of the Union List) in Annex I to the Regulation through the publication and entry into force of the Implementing Regulation (EU) No 872/2012.⁸⁰ At a later stage Parts B to F of the Union List covering for example the category of “other flavourings” will be populated.⁸¹

Article 9 of the Regulation refers to flavourings and source materials for which an evaluation and approval is required. These are:

- Flavouring substances,
- Flavouring preparations obtained from non-food materials,
- Thermal process flavourings obtained by heating ingredients from non-food sources and/or deviating from the conditions for the production set out in Annex V and/or exceeding the maximum levels for certain undesirable substances set out in Annex V,
- Flavour precursors obtained from source materials other than food,
- Other flavourings,
- Source materials other than food.

For more information regarding the definitions of these flavourings and source materials please refer to Chapter I of this Guidance Document (Definitions).

Article 10 of the Regulation provides for the legal implications of the Union List (Art. 10 of the Regulation still refers to the “Community List”).

In the future only those flavourings and source materials subject to Article 9 which are included in the Union list may be placed on the market as such and used in or on foods.

⁷⁸ See Articles 9-12 as well as Annex I of the Regulation.

⁷⁹ See General Introduction and reference to Lisbon Treaty (Footnote 4).

⁸⁰ Commission Implementing Regulation (EU) No 872/2012 adopting the list of flavouring substances provided for by Regulation (EC) No 2232/96, [...] introducing it in Annex I to Regulation (EC) No 1334/2008 (OJ L 267/1, 2.10.2012)

⁸¹ See Article 2 of Commission Regulation (EU) No 873/2012

For more information regarding the application of Art. 10 of the Regulation, please refer to Chapter VI – Transitional and final provisions, Section 3 of this Guidance Document.

Article 11 of the Regulation refers to the conditions for inclusion of flavourings and source materials in the Union list and defines the procedure for its amendment.

The inclusion of flavourings and source materials as well as the procedure for the amendment of the Union list has to be done in accordance with the “Common Authorisation Procedure” as laid down in Regulation (EC) No 1331/2008.⁸²

The Common Authorisation Procedure (CAP) lays down the procedural frame for the assessment and authorisation for all ingredients which are subject to evaluation and authorisation under each sectoral food law before they may be placed on the market.⁸³

The implementing measures for CAP defining the format and content of an application and data required for the risk assessment of the substances concerned have been established and published in the Official Journal: Commission Regulation (EU) No 234/2011 implementing Regulation (EC) No 1331/2008.⁸⁴

The implementing measures have applied since 11 September 2011. For the submission of a dossier of a new flavouring (flavouring substance or any flavouring and source material covered by Art. 9 (b)-(f)) the EFSA Guidance on the data required for the risk assessment of flavourings to be used in or on foods has to be followed. This Guidance Document (EFSA scientific opinion) has been published in the EFSA Journal 2010; 8(6):1623.

For that purpose the Commission has issued a *Practical guidance for applicants on the submission of applications on food additives, food enzymes and food flavourings*.⁸⁵

Article 12 of the Regulation provides that flavourings or source materials falling within the scope of Regulation (EC) No 1829/2003 on genetically modified food and feed should be authorised in accordance with both this Regulation (Flavourings) and the Regulation (EC) 1829/2003/EC.⁸⁶

Flavourings which are already listed on the Union list do not require a new authorisation under this Regulation if they are produced from a genetically modified source which is covered by an authorisation in accordance with Regulation (EC) No 1829/2003.

For additional information regarding this **Union List** please refer to the **EFFA Information Letter IL FL/12/07** (See **Attachment III** to this Guidance Document).

Attachment III: EFFA Information Letter IL/12/07

⁸² Regulation (EC) No 1331/2008 of the European Parliament and of the Council of 16 December 2008 establishing a Common Authorisation Procedure for food additives, food enzymes and food flavourings, OJ L 354, 31.12.2008, p. 1.

⁸³ See Article 1.1 of Regulation 1331/2008/EC (CAP).

⁸⁴ OJ L 64, 11.3.2011, p. 15.

⁸⁵ See : http://ec.europa.eu/food/food/FAEF/authorisation_application_en.htm

⁸⁶ OJ L 268, 18.10.2003, p.1.

Chapter IV (Articles 15–17 and Article 29)

Labelling of Flavourings

1. Objective

The interpretation of the labelling rules for flavourings (Articles 15, 16, 17 and 29) respects the principles of the Regulation, should be simple and help identifying the most appropriate labelling for flavourings. EFFA's guidance on labelling and natural labelling in particular, must not mislead customers and consumers, be clear and easy to understand, transparent, and closely aligned with market perceptions.

2. General labelling requirements for flavourings

2.1. Labelling B2B – Labelling of flavourings not intended for sale to the final consumer

The 'business to business' (B2B) labelling requirements for flavourings are stipulated in Article 15. These requirements include the 'sales description' and are similar to those laid down in Directive 88/388/EEC⁸⁷ with three additions. These require that *a date of minimum durability or use-by-date* and *allergen information according to the food labelling Directive⁸⁸ as amended*, and, if necessary, *the special conditions for storage and/or use* have to be mentioned on a label on the packaging of the product. It is not sufficient that this information is only provided on the accompanying documents.

Additional note on Art. 15.1 (g):

In particular Art. 15.1 (g) stipulates the following:

(g) an indication of the maximum quantity of each component or group of components subject to quantitative limitation in food and/or appropriate information in clear and easily understandable terms enabling the purchaser to comply with this Regulation or other relevant Community law;

To comply with the requirements laid down in art 15.1 (g), the following has to be taken into account / it is recommended to take into account:

- a) "Restricted substances" as listed in Annex III Part B of the present Regulation EC (No) 1334/2008 (see Chapter II of this Guidance Document for further information)
- b) "Primary products" defined as primary smoke condensates and primary tar fractions as laid down in Art. 3 of the Regulation (EC) No 2065/2003 on smoke flavourings; in the case of a derived smoke flavouring as defined in Art. 3, the quantitative relation to the primary product has to be given according to Art. 13 of

⁸⁷ Council Directive 88/388/EEC of 22 June 1988 on the approximation of the laws of the Member States relating to flavourings for use in foodstuffs and to source materials for their production – OJ L 184, 15.7.1988, p. 61.

⁸⁸ Directive 2000/13/EC of 20 March 2000 on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs – OJ L 109, 6.5.2000, p. 29.

the Regulation (EC) No 2065/2003. The identifying code and the quantity have to be provided as soon as the List of authorized primary products is of application.

- c) Caffeine and quinine as laid down in Directive 2002/67/EC [*which will be repealed as from 13 December 2014 and replaced by Regulation (EU) No 1169/2011⁸⁹*] on the labeling of foodstuffs containing quinine, and of foodstuffs containing caffeine
- d) Glycyrrhizinic acid as mentioned in Directive 2004/77/EC on the labelling of certain foods containing glycyrrhizinic acid and its ammonium salts
- e) Additives as laid down the Regulation EC (No) 1333/2008

Multifunctional substances can be used for flavouring purposes (flavouring substances) or for technological purposes (additives). For these substances the declaration should be done according to the following:

- a. If the substance is used for its flavouring properties, and if no restriction has been laid down in Annex I of the Union List, no quantitative disclosure is provided.
- b. If the substance is used for its flavouring properties and if a restriction of use has been laid down in Annex I of the Regulation EC (No) 1334/2008, either the quantitative disclosure of the substance will be provided, or otherwise *appropriate information in clear and easily understandable terms*.
- c. If the substance is known to be restricted from all sources (i.e. benzyl alcohol), the substance has to be quantitatively disclosed from all its sources regardless whether it is used as a flavouring substance or as an additive.
- d. If the substance is used as an additive for which restrictions have been laid down, the quantitative disclosure will be provided.

2.2. Labelling B2C – Labelling of flavourings intended for sale to the final consumer

In Article 17 the rules for the labelling of flavourings intended for sale to the final consumer are provided. The requirements for this 'Business to Consumer' (B2C) labelling refer to directives and regulations (and amendments thereof) that are relevant for food labelling.

The B2C-rules and the rules for the designation in the ingredient list of final food for labelling flavourings as 'natural' are equivalent to the rules that apply to B2B. These rules are provided in Article 16.

2.3. Labelling of flavourings on the final consumer product

The rules for the labelling of flavourings on the consumer product are provided in Article 29. The final labelling is the responsibility of the food manufacturer.⁹⁰ In case of uncertainty it is recommended to consult the flavour supplier for additional information or help.

⁸⁹ Regulation (EU) No 1169/2011 on the provision of food information to consumers – OJ L 304, 22.11.2011, p. 18

⁹⁰ See Regulation (EU) No 1169/2011 on the provision of food information to consumers, Art. 8.2 & 8.8

The B2C-rules and the rules for the designation in the ingredient list of final food for labelling flavourings as 'natural' are equivalent to the rules that apply to B2B. These rules are provided in Article 16. However, the assessment of the sensorial properties that determine the labelling in the final product (i.e. designation in the list of ingredients) has to be done by the food manufacturer. The labelling of the flavouring provided by the flavour industry (sales description) is a helpful indication. At all cases the denomination 'flavouring' will be suitable (see Paragraph 3 below).

2.3.1. Labelling of smoke flavourings

When flavouring materials are used that are defined as 'smoke flavourings' and at the same time add a smoky taste to the final food (Article 29), the term 'smoke flavouring(s)' or 'smoke flavouring(s) produced from <<food(s) or food category or source(s)>>' should appear separately in the ingredient list of the final food. An example of the last category is 'smoke flavouring produced from beech'. The assessment of the sensorial properties that determine whether 'smoke flavourings' appear in the labelling of the final product (i.e. designation in the list of ingredients) has to be done by the food manufacturer.

EFFA reiterates that the term 'natural' should be avoided in combination with the term 'smoke flavourings', since it could mislead the consumer about the naturalness of a product or of the production process (see whereas (27)).

3. Labelling of flavourings

'Flavourings' or 'a more specific name or description of the flavouring', continue to be authorised terms (see Article 15). Examples of 'more specific names or descriptions of the flavouring' are: 'apple flavouring', 'banana flavouring', 'roasted chicken flavouring', and others, where an indicator of the flavour-profile is added to the sales description. Where applicable (i.e. where the composition of the flavouring does allow) specific names such as 'orange oil', 'lemon oil', 'yeast extract', 'spice extracts' (i.e. mentioning the name of Essential oils and extracts), and others, remain authorised.

3.1. Natural labelling

The overall condition that needs to be met is that the flavouring component⁹¹ can only contain natural flavouring substances and/or flavouring preparations. There are 4 terms for the sales description of natural flavourings (see Article 16 paragraphs 3-6). The use of these terms is optional, since 'flavouring' or 'a more specific name or description of the flavouring' remains possible.⁹²

3.1.1. Natural flavouring substances

Article 16.3: The term "natural flavouring substance(s)" may only be used for flavourings in which the flavouring component contains exclusively natural flavouring substances.

⁹¹ The flavouring component: i.e. materials that fit the definition of the flavouring categories as defined in Article 3.2. Article 3.2 (c) defines 'natural flavouring substances'. Article 3.2 (d) defines 'flavouring preparations'.

⁹² See Article 15.1 (a) of the Regulation.

The term '*natural flavouring substances*' is authorised for use if the flavouring component only contains flavouring materials that fit the definition '*natural flavouring substance*'. If preferred and if applicable, the term '*natural <<X⁹³>> flavourings*', '*natural <<X>> flavouring with other natural flavourings*' or '*natural flavouring*' may be used as an alternative.

3.1.2. Natural <<X>> flavouring

Article 16.4: The term "natural" may only be used in combination with a reference to a food, food category or a vegetable or animal flavouring source if the flavouring component has been obtained exclusively or by at least 95% by w/w from the source material referred to.

The description shall read "natural <<food(s) or food category or source(s)>> flavouring".

The flavouring component should be obtained at least 95% by w/w from the source material referred to and the flavour perception of the named source needs to be easily recognized⁹⁴.

Assessment of the 95/5-ratio

The 95/5-ratio is examined on the basis of the formula composition. At least 95% by w/w of the flavouring component (i.e. flavouring preparations and/or natural flavouring substances as defined under Article 3 of the Regulation) have to be obtained from the source material(s) referred to. The wording of the Regulation indicates that when considering a "flavouring preparation" – as part of the "flavouring component" of a given "natural <<X>> flavouring" – in the quantitative determination pursuant to Art. 16.4, the entire "flavouring preparation"⁹⁵ has to be taken into account. Substances subsequently added as agents for diluting or dissolving such flavouring preparations are not considered as being part of them and are therefore subject to separate indication in B2B documents.

"Special requirements for the other maximum 5%"

Recital (26) of the Regulation refers to the other 5% of the flavouring component (from other sources). This text is interpreted as follows: As the use of flavourings should not mislead the consumer concerning the source materials used for the production of natural flavourings, the other maximum 5 % by w/w from other sources should only be used to adjust natural variations in the flavour profile to ensure a consistent quality and/or to introduce special notes to the flavouring. Examples provided are a more fresh, pungent, ripe or green note and/or to modify the flavour profile. However, the 5% part may not reproduce the total flavor profile of the 95% part from the source material referred to; otherwise the flavouring does not meet the provisions of article 16(4). (See Attachment VI: "Flavour Wheels")

⁹³ <<X>> stands for <<food(s) or food category or source(s)>>.

⁹⁴ It is recognized that different flavouring materials have different sensorial thresholds and that flavour-perception cannot be quantified easily. The qualification for meeting the requirement 'can easily be recognized' will therefore be based on expert opinion, by e.g. a flavourist or a sensory panel evaluating the consumer product. The labelling of consumer products is the responsibility of the food manufacturer.

⁹⁵ See Chapter 1, Sub-Section 4.

Natural <<X and Y>> flavouring

It is possible to label flavourings as '*natural <<X and Y>> flavouring*' when the total source material from the named sources is at least 95% by w/w of the flavouring component. The flavour perception of the named sources needs to be easily recognised⁹⁷. In line with the labelling requirements, the major contributor by weight needs to be mentioned first. In general it is recommended to refer to two sources as a maximum.

3.1.3. Natural <<X>> flavouring with other natural flavourings

Article 16.5: The term "natural <<food(s) or food category or source(s)>> flavouring with other natural flavourings" may only be used if the flavouring component is partially derived from the source material referred to, the flavour of which can easily be recognised.

To label a flavouring as '*natural <<X>> flavouring with other natural flavourings*' it is required that flavouring materials derived from the named source(s) are present⁹⁶ and that their flavour can easily be recognised⁹⁷. Decisions on the fulfilment of these requirements and consequently if the use of above term is appropriate, will be made on a case-by-case basis at company level. In case of uncertainty, i.e. if the source(s) cannot easily be recognised, it is recommended to use the labelling '*natural flavouring*' (see Article 16.6).

Natural <<X and Y>> flavouring with other natural flavourings

It is possible to label flavourings as e.g. '*natural <<strawberry and vanilla >> flavouring with other natural flavourings*' when source material from strawberry and vanilla is present. The flavour perception of strawberry and vanilla needs to be easily recognised⁹⁷. In line with the labelling requirements, the major contributor by weight needs to be mentioned first. In general it is recommended to refer to two sources as a maximum.

3.1.4. Natural flavouring

Article 16.6: The term "natural flavouring" may only be used if the flavouring component is derived from different source materials and where a reference to the source materials would not reflect their flavour or taste.

The term '*natural flavouring*' is only available for flavourings when a clear relationship between the different source materials used in the flavouring component and the overall flavour-profile does not exist. Also in case of uncertainty about this relationship, it is recommended to use the term '*natural flavouring*'.

It is EFFA's understanding that in case one source material is used the same principle can be adhered to.

⁹⁶ Recital (26) mentions an upper limit in the flavouring component of less than 95% by weight. A minimum limit is not provided.

GENERAL NOTE:

Examples of labelling flavourings are given in the Attachment IV and a Flow Chart is given for additional guidance in Attachment V.

Attachment IV: Examples of labelling flavourings

Attachment V: Flow chart for labelling

Attachment VI: “Flavour wheels”

Chapter V (Articles 19 and 20)

Procedural Provisions and Implementation Reporting and Monitoring

Chapter V “Procedural Provisions and Implementation” of this Regulation mainly focuses on reporting that has to be carried out by the food business operators⁹⁷ and by the Member States.⁹⁸ As rules for implementation of paragraph 1 of Article 19 and a common methodology for the gathering of data by Member States are not available yet the following remarks are preliminary.

1. Article 19 – Reporting by the food business operators

Paragraph 1 only refers to reporting by food business operators of flavouring substances as it is explained in Recital (28):

“For the evaluation of the safety of flavouring substances for human health, information on the consumption and use of flavouring substances is crucial. The amounts of flavouring substances added to food should therefore be checked on a regular basis.”

This is the reason why at the request of the Commission, a producer or user of a flavouring substance (or their representative) will inform the Commission of the amount of the flavouring substance added to foods in the European Union in a period of 12 months (European poundage data).

This information will be kept confidential insofar as it is not required for the safety assessment⁹⁹. In some cases, the food industry together with the flavour industry will have to provide use levels for some specific food categories to the Commission, as referred to in Regulation 1565/2000.¹⁰⁰ This information shall be made available to Member States.¹⁰¹

Detailed rules will be adopted for the implementation of the above requirements.¹⁰²

Paragraph 2 states that when a company is aware that either the production method or the starting material for a flavouring is significantly different from that included in the risk assessment for its first submission, the company should provide the Commission with all relevant data prior to the marketing of the flavouring.¹⁰³

For the current evaluation of chemically defined flavouring substances, the flavour industry provided data according to Article 3 of Regulation 1565/2000. It is worth noting that Article 3 does not request either the production method or the starting material of

⁹⁷ See Article 19 of the Regulation

⁹⁸ See Article 20 of the Regulation.

⁹⁹ See Article 19.1 of the Regulation.

¹⁰⁰ Commission Regulation (EC) No 1565/2000 of 18 July 2000 laying down the measures necessary for the adoption of an evaluation programme in application of Regulation (EC) No 2232/96 of the European Parliament and of the Council, OJ L 180, 19.7.2000, p. 8.

¹⁰¹ See Article 19.2(last sentence) of the Regulation.

¹⁰² See Article 19.4 of the Regulation.

¹⁰³ See Article 19.2 of the Regulation.

the substance, therefore Paragraph 2 of Article 19 of the Regulation is currently not applicable to the flavouring substances on Part A of the Union list.¹⁰⁴

However, new dossiers have to provide more details on the production process.

In addition, if a producer has reasons to notify differences and is of the opinion that the new starting material or production method has to be evaluated in order to comply with the conditions set out in Article 4 of this Regulation, the producer has to submit data to the Commission.

Following a request from the Commission, the Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (EFSA CEF Panel) was asked to provide scientific advice regarding the data required for the evaluation of flavourings. This Guidance Document has been published in the EFSA Journal 2010; 8(6):1623.

On the basis of this scientific advice, the Commission has established and published implementing measures (see Ch III).⁸⁴

Paragraph 3 urges food business operators to *inform the Commission immediately of any new scientific or technical information which is known and accessible and might affect the assessment of the safety of the flavouring substance.*¹⁰⁵

2. Article 20 – Monitoring and reporting by the Member States

According to **Paragraph 1** *Member States shall establish systems to monitor the consumption and use of flavourings set out in the Union list and the consumption of the substances listed in Annex III¹⁰⁶ on a risk-based approach, and shall report their findings with appropriate frequency to the Commission and to the Authority.*¹⁰⁷

Member States are given the task to monitor

- the consumption and use of flavourings of the Union List,
- the consumption of the substances as listed in Annex III.

Annex III contains 2 parts (see also Chapter II):

- The first part (part A) refers to substances which shall not be added as such to food.
- The second part (part B) refers to maximum levels not to be exceeded of certain substances, naturally present in flavourings and food ingredients with flavouring properties, in certain compound food as consumed to which flavourings and/or food ingredients with flavouring properties have been added.

Member States have to work on a risk-based approach and shall report their findings regularly to the Commission and to the Authority.

A common methodology for gathering the information on the two above mentioned subjects had to be adopted after consultation with EFSA and in accordance with the regulatory procedure by 20 January 2011 (Working Document not yet available).¹⁰⁸

¹⁰⁴ See Annex (Union List Part A) to Implementing Regulation (EU) No 872/2012 adopting the list of flavouring substances (OJ L 267/1)

¹⁰⁵ See Article 19.3 of the Regulation.

¹⁰⁶ See Chapter II on Conditions of use of this Guidance Document.

¹⁰⁷ See Article 20.1 of the Regulation.

¹⁰⁸ See Article 20.2 of the Regulation.

Chapter VI (Articles 30, 24, 10 and 22)

Transitional and Final Provisions Entry into Force and Application

1. Article 30 – Entry into force and application of the Annexes

1.1 Paragraph 1 of Article 30

The new legislation governing the use of flavourings within the EU is a Regulation which entered into force the 20 January 2009.¹⁰⁹

1.2. Paragraphs 2 and 3 of Article 30

The date of application of the Regulation was 24 months after its entry into force (i.e. 20 January 2011).¹¹⁰ Between the date of entry into force and the date of application, the respective national legislations of the Member States still applied.

Article 27 of the Regulation specifies that the “List of flavouring substances” provided for by Regulation (EC) 2232/96 of the European Parliament and of the Council should have been adopted at the latest by 31 December 2010.¹¹¹ However, the List of flavouring substances has meanwhile been adopted and published on 1 and 2 October 2012, resp. through the Commission Implementing Regulation (EU) No 872/2012.

This “List of flavouring substances” is part A of the “Union List of flavourings and source materials” (i.e. Annex I to the Flavour Regulation).⁸⁰ Art. 25 stipulates that the “Union List of flavourings and source materials” shall be established by introducing the “List of flavouring substances” into Annex I to the Regulation at the time of its adoption. The List entered into force on 22 October 2012 and will apply 6 months after that date, i.e. on 22 April 2013.

Art. 10 of the Regulation (EC) No 1334/2008 shall apply from 18 months after the date of application of the Union List Part A, i.e. on 22 October 2014.

After that date only those flavouring substances that have been evaluated and approved and are included in Part A of the Union List may be placed on the market as such and used in or on foods under the conditions of use specified therein, where applicable.¹¹²

1.3. Paragraph 4 of Article 30

Definitions in specific legislations on spirit drinks (Regulation (EC) No 110/2008) and aromatized wines (Regulation (EEC) No 1601/91) which need to be adapted to certain new definitions¹¹³ will apply from the date of application of the Union list, i.e. from 22 April 2013.¹¹⁴

¹⁰⁹ See Article 30 Paragraph 1 of the Regulation.

¹¹⁰ See Article 30 Paragraph 2 of the Regulation.

¹¹¹ See Article 27 of this Regulation.

¹¹² See Article 9 and 10 of this Regulation.

¹¹³ See Article 26 and 28 of the Regulation.

¹¹⁴ See Article 30 Sentence 4 of the Regulation and Art. 5 of the Commission Regulation (EU) No 873/2012 on transitional measures concerning the Union list of flavourings and source materials (OJ L 267/162).

1.4. Paragraph 5 of Article 30

The legal basis for amendments to Annexes II to V¹¹⁵ applied from the date of entry into force, i.e. 20 January 2009,¹¹⁶ which means that the Annexes II-V could be amended from that date, if necessary. However, up to now there have been no amendments to these Annexes.

Foods lawfully placed on the market or labelled prior to 20 January 2011 which do not comply with this Regulation may be marketed until their date of minimum durability or use-by-date.¹¹⁷

The Regulation covers flavourings and certain food ingredients with flavouring properties for use in and on foods. EFFA's interpretation is that this transition period applies not only to the final foodstuff but also to the flavourings. Flavourings do comply with the definition of a food as laid down in Regulation 178/2002: "any substance or product, whether processed, partially processed or unprocessed, intended to be, or reasonably expected to be ingested by humans". The Commission has given the same interpretation.

'Placing on the market' means the holding of food or feed for the purpose of sale, including offering for sale or any other form of transfer, whether free of charge or not, and the sale, distribution, and other forms of transfer themselves.¹¹⁸

2. Article 24 – Repeals

Directive 88/388/EEC (EC Flavours Directive), Decision 88/389/EEC (establishment of an inventory of the source materials and substances used in the preparation of flavourings) and Directive 91/71/EEC (labelling of flavourings intended for sale to the final consumer) have been repealed as of 20 January 2011.¹¹⁹

Directive 88/388 provided maximum levels for Restricted Substances (commonly referred to as "biologically active principles"). As this Directive has been repealed, maximum limits set in 88/388/EEC and in respective national legislations no longer apply and operators have to use the new maximum levels set in the Regulation.¹²⁰

Regulation (EC) No 2232/96 (Common procedure for flavouring substances) and Regulation (EC) No 1565/2000 (adoption of evaluation program) shall be repealed from the date of application of the "List of flavouring substances",¹²¹ i.e. on 22 April 2013 but will continue to apply to "flavouring substances under evaluation" pending their inclusion as evaluated substances in Part A of the UL or their removal from that list.¹²² Decision No 1999/217 (Register of flavouring substances) is repealed with effect from 22 April 2013.¹²³

¹¹⁵ See Article 22 of the Regulation (Amendments to Annexes II to V). See further comments under Section 4.

¹¹⁶ See Article 30 Sentence 5 of the Regulation.

¹¹⁷ See Article 30 Sentence 6 of the Regulation.

¹¹⁸ See Article 3.8 of Regulation (EC) No 178/2002 ("*General Food Law*").

¹¹⁹ See Article 24.1 of the Regulation.

¹²⁰ See EFFA Q&A dedicated to Chapter II – Restricted Substances – Annex III

¹²¹ See Article 24.2 of the Regulation.

¹²² See Art. 6 & 7 of Commission Implementing Regulation (EU) No 872/2012.

¹²³ See Art. 8 of Commission Implementing Regulation (EU) No 872/2012.

National specific legislations (conditions of use for “nature identical” and/or “artificial” flavouring substances) are officially revoked at the date of application of the “List of flavouring substances”.

References to the repealed acts shall be construed as references to the new Regulation.¹²⁴

3. Article 10 – Union list of flavourings and source materials

It is EFFA’s understanding that any flavouring substance not on Part A of the Union list, even if evaluated by JECFA, may not be placed on the market as such and used in or on foods after the application date of Article 10 (i.e. 22 October 2014).

Regarding flavourings and source materials for which an evaluation and approval is required, as mentioned under Chapter V EFSA has adopted the Guidance on the data required for the risk assessment of flavourings to be used in or on foods. This Guidance Document (EFSA scientific opinion) has been published in the EFSA Journal 2010; 8(6):1623.

- Part A of this Guidance provides a proposal concerning the data required for the risk assessment of flavouring substances, i.e. chemically defined substances with flavouring properties.
- Part B of this Guidance provides a proposal concerning the data required for the risk assessment of categories of flavourings other than flavouring substances for which an evaluation and an approval is required according to Article 9 (b) – (f) of the Regulation.

On the basis of this scientific opinion, the Commission has established and published implementing measures (see Ch III).⁸⁴

4. Article 22 – Amendments to Annexes II to V

*Annexes II to V to this Regulation should be adapted as necessary to scientific and technical progress, taking into account the information provided by producers and users of flavourings and/or resulting from the monitoring and controls by the Member States*¹²⁵.

Amendments to the above mentioned Annexes shall be adopted in accordance with the regulatory procedure with scrutiny¹²⁶ as referred to in Article 21(3)¹²⁷ of this Regulation.¹²⁸

¹²⁴ See Article 24.3 of the Regulation.

¹²⁵ See Recital (32) of the Regulation.

¹²⁶ The “regulatory procedure with scrutiny” is one of the legislative procedures embedded in the so-called Comitology system. According to Article 202 ECT the Commission implements the legislative acts adopted by the Council (such as for example the present EC flavourings regulation). In line with the so-called Comitology system established by Decision 1999/468/EC (See OJ L 184, 17.7.1999, p.23 amended by Council Decision 2006/512/EC, of 17 July 2006, OJ L 200, 22.7.2006, p.11) the Commission will be assisted by Committees when implementing the Council’s legislative acts. Committees are forums for discussion consisting of representatives from Member States and are chaired by the Commission. They enable the Commission to establish a dialogue with national administrations before adopting implementing measures. So-called “regulatory committees with scrutiny” must allow the Council and the European Parliament (EP) to carry out a check *prior* to the adoption of measures of general scope designed to amend non-essential elements (Please also refer to Recital 30 of the EC flavourings Regulation) of a basic instrument adopted by co-decision. In the event of opposition of either the

When, on imperative grounds of urgency, the normal time-limits¹²⁹ for the regulatory procedure with scrutiny cannot be complied with, the Commission should be able to apply the urgency procedure provided for in Article 5a(6) of Decision 1999/468/EC for the adoption of amendments to Annexes II to V to this Regulation.¹³⁰

EFFA notes that Regulation (EU) No 182/2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers entered into force on 1st of March 2011.¹³¹ The transition provisions stipulated in Article 13 of the above mentioned regulation should be observed.

Attachment VII: EFFA Information Letter 13/03 (Time Lines & Transitional periods Union List)
Attachment VIII: Annex to EFFA IL 13/03: Timeline Charts

First version, 18/02/09
Revised version (V2.0), 03/09/10
2nd Revised version (V3.0), 11/03/13

Council or the EP, the Commission may not adopt the proposed measure, although it may submit an amended proposal or a new proposal.

¹²⁷ Article 21.3 of the Regulation refers to Articles 5 a (1) to (4) as well as to Articles 7 and 8 of Decision 1999/468/EC detailing the modus operandi of the regulatory procedure with scrutiny.

¹²⁸ See Article 22 and Recital (30) of the Regulation.

¹²⁹ The normal time limits are set forth in paragraphs (3), (4) and 5(a) of Decision 1999/468/EC.

¹³⁰ See Recital (31) of the Regulation as well as Article 22 referring to Article 21.4 of the Regulation.

¹³¹ See Regulation (EU) No 182/2011 (OJ L 55/13, 28.2.2011)