Index of IFRA Standards – 47th Amendment

The IFRA recommendations are grouped into three categories as follows:

P (prohibited)	The material should not be used as a fragrance ingredient.
R (restricted)	The use of the material should be limited quantitatively.
S (specified)	The material should only be used if it meets certain purity criteria or if it used in conjunction with other materials.

8 NEW Standards and (are indicated in yellow). For existing Standards that are changed, the Amendment date is highlighted in yellow.

	Substance	CAS	Last Amended	Standard
1.	Acetyl ethyl tetramethyl tetralin (AETT, Versalide)	88-29-9	11.77 (05.06) [1]	**P**
2.	5-Acetyl-1,1,2,3,3,6-hexamethyl indan (AHMI, Phantolid)	15323-35-0	10.87 (04.05)	**R**
3.	Acetyl isovaleryl (5-Methyl-2,3-hexanedione)	13706-86-0	02.80 (05.06)	**P**
4.	Alantroot oil (Elecampane oil)	97676-35-2	06.75 (05.06)	**P**
5.	Allyl Esters	N/A	02.77 (07.09)	**S**
6.	Allyl heptine carbonate	73157-43-4	05.07 (07.08)	**P**

[1] The dates in brackets indicate a modification of the Standard that did NOT affect the IFRA recommendations (for instance, an update of the references or a reformatting of the Standard). The dates without brackets refer to a change that affected the IFRA recommendations.

IFRA Operations
Avenue des Arts, 6
1210 Brussels, Belgium
Tel: +32-2 214 20 60
Fax: +32-2 214 20 69
www.ifraorg.org

	Substance	CAS	Last Amended	Standard
7.	Allyl isothiocyanate	57-06-7	(07.08)	**P**
8.	Allyl phenoxyacetate	7493-74-5	07.09	**R-S**
9.	Angelica root oil	8015-64-3	10.78 (04.05)	**R**
10.	alpha-Amyl cinnamic alcohol	101-85-9	05.07	**R**
11.	alpha-Amyl cinnamic aldehyde	122-40-7	06.13 (05.07)	**R**
12.	Amylcyclopentenone	25564-22-1	05.07 (07.08)	**P**
13.	Anisyl alcohol	105-13-5	05.07	**R**
14.	Anisylidene acetone (4-(p-methoxyphenyl)-3-butene-2-one)	943-88-4	11.74 (05.06)	**P**
15.	cis-and trans-Asarone ((E)-and(Z)-2,4,5-Trimethoxypropen-1-yl benzene)	2883-98-9 5273-86-9	12.91	**P-R**
16.	Benzaldehyde	100-52-7	06.13 (07.09)	**R**
17.	Benzene	71-43-2	04.04	**P**
18.	Benzyl alcohol	100-51-6	05.07	**R**
19.	Benzyl Benzoate	120-51-4	05.07	**R**
20.	Benzyl cinnamate	103-41-3	05.07	**R**
21.	Benzyl cyanide	140-29-4	04.04	**P**
22.	Benzylidene acetone (4-Phenyl-3-buten-2-one)	122-57-6	06.74 (05.06)	**P**
23.	Benzyl salicylate	118-58-1	05.07	**R**
24.	Bergamot oil expressed	8007-75-8	06.92	**R**

	Substance	CAS	Last Amended	Standard
25.	Birch wood pyrolysate	8001-88-5 84012-15-7 85940-29-0 68917-50-0	06.13 (04.04)	**S-P**
26.	Bitter orange peel oil expressed	68916-04-1 72968-50-4	07.02	**R**
27.	Boldo oil	8022-81-9	07.09	**P**
28.	3-Bromo-1,7,7-trimethylbicyclo[2.2.1]heptane-2-one	76-29-9	(07.08)	**P**
29.	Bromostyrene	103-64-0	(07.08)	**P**
30.	alpha-Butylcinnamaldehyde	7492-44-6	06.11	**R**
31.	p-tert-Butyl-dihydrocinnamaldehyde (Bourgeonal)	18127-01-0	07.08	**R**
32.	p-tert-Butyl-alpha-methylhydrocinnamic aldehyde (BMHCA)	80-54-6	06.13 (07.08)	**R**
33.	p-tert-Butylphenol	98-54-4	06.75 (05.06)	**P**
34.	Cade oil (Juniperus oxycedrus L.)	8013-10-3 90046-02-9	06.13 (04.04)	**S-P**
35.	Carvone; d-Carvone; l-Carvone	99-49-0 2244-16-8 6485-40-1	07.08	**R**
36.	Carvone oxide	33204-74-9	04.04	**P**
37.	Chenopodium oil	8006-99-3	(07.08)	**P**
38.	Cinnamic alcohol	104-54-1	07.08	**R**
39.	Cinnamic aldehyde	104-55-2	06.13 (07.08)	**R**
40.	Cinnamic aldehyde dimethyl acetal	4364-06-1	07.09	**R**
41.	Cinnamylidene acetone	4173-44-8	(07.08)	**P**
42.	Cinnamyl nitrile	1885-38-7 4360-47-8	07.08	**R**

	Substance	CAS	Last Amended	Standard
43.	Citral	5392-40-5 141-27-5 106-26-3	06.13 (05.06)	**R**
44.	Citronellol	106-22-9 1117-61-9 26489-01-0 6812-78-8 141-25-3 68916-43-8 7540-51-4	05.07	**R**
45.	Citrus oils and other furocoumarins containing essential oils		12.96	**R**
46.	Colophony	8050-09-7	12.92 (05.06)	**P**
47.	Costus root oil, absolute and concrete	8023-88-9	05.98 (05.06)	**P**
48.	Coumarin	91-64-5	07.08	**R**
49.	Cumin oil	8014-13-9	06.86 (04.05)	**R**
50.	Cuminaldehyde	122-03-2	06.13	**R**
51.	Cyclamen alcohol (3-(4-Isopropylphenyl)-2-methylpropanol)	4756-19-8	10.78 (02.80)	**P-S**
52.	Cyclamen aldehyde	103-95-7	06.13	**R**
53.	Cyclopentadecanolide	106-02-5	06.13	**R**
54.	Dibenzyl ether	103-50-4	07.09	**R**
55.	1,3-Dibromo-2-methoxy-4-nitro-5-(1,1-dimethylethyl)-6-methyl-benzene (Musk alpha)	63697-53-0	(07.08)	**P**
56.	1,3-Dibromo-2-methoxy-4-methyl-5-nitrobenzene (Musk KS)	62265-99-0	(07.08)	**P**
57.	2,2-Dichloro-1-methylcyclopropylbenzene	3591-42-2	(07.08)	**P**

	Substance	CAS	Last Amended	Standard
58.	2,4-Dienals (group of materials)	764-40-9 80466-34-8 5910-85-0 30361-28-5 6750-03-4 2363-88-4 13162-46-4 21662-16-8 …	06.13 (07.09)	**P**
59.	Diethyl maleate	141-05-9	06.75 (05.06)	**P**
60.	Dihydrocoumarin (Melilotine)	119-84-6	06.13 (05.06)	**R**
61.	2,4-Dihydroxy-3-methylbenzaldehyde	6248-20-0	04.89 (05.06)	**P**
62.	Dimethylcyclohex-3-ene-1-carbaldehyde (mixed isomers)	68737-61-1 68039-49-6 68039-48-5 27939-60-2 67801-65-4	06.13 (06.10)	**R**
63.	1-(5,5-Dimethyl-1-cyclohexen-1-yl)pent-4-en-1-one	56973-85-4	07.09	**R**
64.	4,6-Dimethyl-8-tert-butylcoumarin (Butolia)	17874-34-9	06.81 (05.06)	**P**
65.	3,7-Dimethyl-2-octen-1-ol	40607-48-5	04.04	**P**
66.	2,2-Dimethyl-3-(3-tolyl)propan-1-ol (Majantol)	103694-68-4	06.10	**R-S**
67.	Dimethyl citraconate	617-54-9	10.76 (05.06)	**P**
68.	Diphenylamine	122-39-4	04.04	**P**
69.	Esters of 2-octynoic acid (Except Methyl heptine carbonate which is IFRA Restricted)	10484-32-9 10519-20-7	(07.08)	**P**
70.	Esters of 2-nonynoic acid, (Except Methyl octine carbonate)	10031-92-2	(07.08)	**P**

	Substance	CAS	Last Amended	Standard
71.	Estragole (Methyl chavicol)	140-67-0	(07.09)	**R**
72.	2-Ethoxy-4-methylphenol	2563-07-7	07.08	**R**
73.	Ethyl acrylate	140-88-5	11.74 (05.06)	**P**
74.	p-Ethylbenzaldehyde	4748-78-1	06.13	**R**
75.	Ethylene glycol monoethyl ether and its Acetate	110-80-5 111-15-9 (acetate)	04.04	**P**
76.	Ethylene glycol monomethyl Ether and its Acetate	109-86-4 110-49-6 (acetate)	04.04	**P**
77.	Eugenol	97-53-0	07.08	**R**
78.	Farnesol	4602-84-0	05.06	**R-S**
79.	Fig leaf absolute	68916-52-9	05.83 (05.06)	**P**
80.	Furfural	98-01-1	06.13	**R**
81.	Furfuryl alcohol	98-00-0	07.09	**P**
82.	Furfurylidene acetone	623-15-4	(07.08)	**P**
83.	Geraniol	106-24-1	05.07	**R**
84.	Geranyl nitrile	5146-66-7 5585-39-7 31983-27-4	11.06 (07.08)	**P**
85.	Grapefruit oil expressed	8016-20-4	06.92	**R**
86.	trans-2-Heptenal	18829-55-5	04.89 (05.06)	**P**
87.	2-Heptylidene cyclopentan-1-one	39189-74-7	06.11	**R**
88.	Hexahydrocoumarin	700-82-3	02.80 (05.06)	**P**
89.	trans-2-Hexenal	6728-26-3	07.08	**R**

	Substance	CAS	Last Amended	Standard
90.	trans-2-Hexenal diethyl acetal	67746-30-9	04.89 (05.06)	**P**
91.	trans-2-Hexenal dimethyl acetal	18318-83-7	04.89 (05.06)	**P**
92.	alpha-Hexyl cinnamic aldehyde	101-86-0	06.13 (05.07)	**R**
93.	alpha-Hexylidene cyclopentanone	17373-89-6	07.08	**R**
94.	Hexyl salicylate	6259-76-3	05.07	**R**
95.	Hydroabietyl alcohol, dihydroabietyl alcohol	13393-93-6 26266-77-3 1333-89-7	04.04	**P**
96.	Hydroquinone monoethyl ether (4-ethoxy-Phenol)	622-62-8	10.83 (05.06)	**P**
97.	Hydroquinone monomethyl ether (4-methoxy-Phenol)	150-76-5	10.83 (05.06)	**P**
98.	Hydroxycitronellal	107-75-5	06.13 (07.08)	**R**
99.	3 and 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene-1-carboxaldehyde (HMPCC)	31906-04-4 51414-25-6	06.13 (07.09)	**R**
100.	p-Isobutyl-α-methyl-hydrocinnamaldehyde	6658-48-6	07.09	**R**
101.	Isobutyl N-methylanthranilate	65505-24-0	07.09	**R**
102.	Isocyclocitral	1335-66-6 1423-46-7 67634-07-5	05.07	**R**
103.	Isocyclogeraniol (2,4,6-Trimethyl-3-cyclohexene-1-methanol)	68527-77-5	07.08	**R**
104.	Isoeugenol	97-54-1	07.08	**R**
105.	Isophorone	78-59-1	(07.08)	**P**
106.	6-Isopropyl-2-decalol (Decatol)	34131-99-2	06.79 (05.06)	**P**

	Substance	CAS	Last Amended	Standard
107.	Jasmine absolute (grandiflorum)	8022-96-6 8024-43-9 90045-94-6 84776-64-7	07.08	**R**
108.	Jasmine absolute (sambac)	91770-14-8	07.08	**R**
109.	Lemon oil cold pressed	8008-56-8	06.92	**R**
110.	Lime oil expressed	8008-26-2	06.92	**R**
111.	Limonene	138-86-3	12.95	**S**
112.	Linalool; d-Linalool; l-Linalool	78-70-6 126-90-9 126-91-0	04.04	**S**
113.	Massoia bark oil	85085-26-3	(07.08)	**P**
114.	Massoia lactone	54814-64-1	(07.08)	**P**
115.	Melissa oil (genuine Melissa officinalis L.)	8014-71-9 84082-61-1	07.09	**R**
116.	p-Mentha-1,8-dien-7-al (Perilla aldehyde)	2111-75-3	06.13 (07.08)	**R**
117.	Menthadiene-7-methyl formate (Isobergamate)	68683-20-5	07.08	**R**
118.	p-Methoxybenzaldehyde	123-11-5	06.13	**R**
119.	o-Methoxycinnamaldehyde	1504-74-1	06.11	**R**
120.	7-Methoxycoumarin	531-59-9	02.79 (07.08)	**P**
121.	Methoxy dicylopentadiene carboxaldehyde (Scentenal)	86803-90-9	07.08	**R**
122.	4-Methoxy-α-methylbenzenepropanal	5462-06-6	06.13 (07.09)	**R**
123.	2-Methoxy-4-methylphenol (p-Creosol)	93-51-6	07.08	**R**

	Substance	CAS	Last Amended	Standard
124.	alpha-Methyl anisylidene acetone (1-(4-Methoxyphenyl)-1-penten-3-one)	104-27-8	05.80 (05.06)	**P**
125.	alpha-Methyl-1,3-benzodioxole-5-propionaldehyde (MMDHCA)	1205-17-0	06.13 (06.10)	**R**
126.	alpha-Methyl cinnamic aldehyde	101-39-3	05.07	**R**
127.	6-Methylcoumarin (Toncarine)	92-48-8	05.80 (05.06)	**P**
128.	7-Methylcoumarin	2445-83-2	05.83 (05.06)	**P**
129.	Methyl crotonate	623-43-8	05.80 (05.06)	**P**
130.	4-Methyl-7-ethoxycoumarin (Maraniol)	87-05-8	06.79 (05.06)	**P**
131.	Methyl Eugenol	93-15-2	07.02	**R**
132.	6-Methyl-3,5-heptadiene-2-one (Methyl heptadienone)	1604-28-0	07.09	**R**
133.	Methyl heptine carbonate (MHC, Folione)	111-12-6	07.08	**R**
134.	p-Methylhydrocinnamic aldehyde	5406-12-2	(07.08)	**P**
135.	Methyl ionone, mixed isomers	1335-46-2 127-42-4 127-43-5 127-51-5 7779-30-8	07.08	**R**
136.	Methyl methacrylate	80-62-6	(07.08)	**P**
137.	Methyl N-methylanthranilate (Dimethyl anthranilate)	85-91-6	07.09	**R**
138.	Methyl beta-naphtyl ketone	93-08-3	04.05	**R**
139.	3-Methyl-2(3)-nonenenitrile (Citgrenile)	53153-66-5	05.07 (07.08)	**P**
140.	Methyl octine carbonate (MOC)	111-80-8	07.08	**R**

	Substance	CAS	Last Amended	Standard
141.	3-Methyl-2-(pentyloxy)cyclopent-2-en-1-one	68922-13-4	06.11	**R**
142.	p-Methyltetrahydroquinoline	91-61-2	07.09	**R**
143.	Moskene (1,1,3,3,5-Pentamethyl-4,6-dinitroindane)	116-66-5	04.05 (07.08)	**P**
144.	Musk ambrette	83-66-9	12.95 (05.06)	**P**
145.	Musk ketone	81-14-1	06.10	**S**
146.	Musk tibetene (1-tert-Butyl-2,6-dinitro-3,4,5-trimethylbenzene)	145-39-1	04.05 (07.08)	**P**
147.	Musk Xylene	81-15-2	07.09	**P**
148.	Nitrobenzene	98-95-3	06.74 (05.06)	**P**
149.	2-Nonyl-1-al dimethyl acetal	13257-44-8	06.11	**R**
150.	Nootkatone	4674-50-4	05.06	**S**
151.	Oak moss extracts	90028-68-5 9000-50-4 68917-10-2	07.08	**R-S**
152.	1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone (OTNE)	54464-57-2	07.08	**R**
153.	1-Octen-3-yl acetate (Amyl vinyl carbinyl acetate)	2442-10-6	07.08	**R**
154.	Opoponax	8021-36-1 9000-78-6 93384-32-8	06.13 (04.99)	**R**
155.	1-(2,4,4,5,5-Pentamethyl-1-cyclopenten-1-yl)ethan-1-one	13144-88-2	06.11	**R**
156.	2-Pentylidene cyclohexanone	25677-40-1	05.83 (05.06)	**P**
157.	Peru balsam crude	8007-00-9	12.91 (05.07)	**P**

	Substance	CAS	Last Amended	Standard
158.	Peru balsam extracts and distillates	8007-00-9	07.08	**R**
159.	Phenylacetaldehyde (Hyacinthin)	122-78-1	05.06	**R**
160.	Phenyl acetone (Methyl benzyl ketone)	103-79-7	(07.08)	**P**
161.	Phenyl benzoate	93-99-2	(07.08)	**P**
162.	3-Phenylbutanal	16251-77-7	06.10	**R**
163.	2-Phenylpropionaldehyde	93-53-8	07.09	**R**
164.	Pinacea derivatives		07.94	**S**
165.	3-Propylidene phthalide	17369-59-4	07.08	**R**
166.	Pseudoionone (2,6-Dimethylundeca-2,6,8-trien-10-one)	141-10-6	04.89 (05.06)	**P-S**
167.	Pseudo Methylionones	26651-96-7 72968-25-3 1117-41-5	07.09	**P**
168.	Quinoline	91-22-5	06.10	**P**
169.	Rose Ketones	23696-85-7 23726-93-4 43052-87-5 24720-09-0 23726-94-5 23726-92-3 23726-91-2 57378-68-4 71048-82-3 39872-57-6 70266-48-7 33673-71-1 35087-49-1 35044-68-9	07.09	**R**
170.	Rue oil	8014-29-7	04.01 (07.02)	**R**
171.	Safrole, Isosafrole, Dihydrosafrole	94-59-7 120-58-1 94-58-6	07.87 (04.99)	**P** **R**

	Substance	CAS	Last Amended	Standard
172.	Santolina oil	84961-58-0	(07.08)	**P**
173.	Savin oil	8024-00-8	06.82	**P-S**
174.	Sclareol	515-03-7	04.05	**S**
175.	Styrax extracts	8046-19-3 8024-01-9 94891-27-7 94981-28-8	06.13 (07.94)	**P-R-S**
176.	Tagetes oil and absolute	91722-29-1 8016-84-0	04.01 (04.05)	**R**
177.	Tea leaf absolute (camellia sinensis leaf extract)	84650-60-2	05.06	**R**
178.	1,2,3,4-Tetrahydro-4-methylquinoline	19343-78-3	07.09	**R**
179.	o,m,p-Tolualdehydes and their mixtures	529-20-4 620-23-5 104-87-0 1334-78-7	06.13	**R**
180.	Toluene	108-88-3	04.04	**P**
181.	Treemoss extracts	90028-67-4 68648-41-9 68917-40-8	07.08	**R-S**
182.	2,6,6-Trimethylcyclohexa-1,3-dienyl methanal (Safranal)	116-26-7	06.13 (12.98)	**R**
183.	Verbena absolute (Lippia citriodora)	8024-12-2	06.10	**R**
184.	Verbena oil	8024-12-2	12.81 (05.06)	**P**
185.	Vetiveryl Acetate (the former specification Standard on Acetylated vetiver oil is replaced by this one)	117-98-6 62563-80-8 68917-34-0 73246-97-6 84082-84-8	07.09	**R-S**
186.	Ylang Ylang Extracts	8006-81-3 68606-83-7 83863-30-3	07.08	**R**