



## IFRA Standards

# Index of IFRA Standards – 51<sup>st</sup> Amendment

30 June 2023

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This document provides a complete index of the IFRA Standards, based on the 51<sup>st</sup> Amendment to the Standards. This Amendment was notified on 30 June 2023.

The IFRA Standards are categorized as follows:

- ≡ **Prohibition:** This material should not be used as a fragrance ingredient.
- ≡ **Restriction:** This material should be used only in the limited quantity as stated in the Standard.
- ≡ **Specification:** This material should be used only if it meets the criteria stated in the Standard.

In some cases, more than one category is applicable.

Name of Ingredient	CAS Number	Standard	Publication Year
Acetic acid, anhydride, reaction products with 1,5,10-Trimethyl-1,5,9-cyclododecatriene	144020-22-4 28371-99-5	Restriction	2020
Acetylated Vetiver oil	84082-84-8 68917-34-0 73246-97-6 62563-80-8	Restriction	2020
3-Acetyl-2,5-dimethylfuran	10599-70-9	Prohibition	2023
Acetyl ethyl tetramethyl tetralin (AETT)	88-29-9	Prohibition	2006
Acetyl hexamethyl indan (AHMI)	15323-35-0	Restriction	2020
Acetyl isovaleryl	13706-86-0	Prohibition	2006
Alantroot oil	84012-20-4 97676-35-2	Prohibition	2006
Allyl 3-cyclohexylpropionate	2705-87-5	Restriction Specification	2023
Allyl esters	Not applicable.	Specification	2009
Allyl heptine carbonate	73157-43-4	Prohibition	2008
Allyl isothiocyanate	57-06-7	Prohibition	2020
Allyl phenoxyacetate	7493-74-5 863306-60-9	Restriction Specification	2020
alpha-Amyl cinnamic alcohol	101-85-9	Restriction	2020
alpha-Amyl cinnamic aldehyde	122-40-7	Restriction	2020
alpha-Amylcinnamaldehyde diethyl acetal	60763-41-9	Restriction	2023



Name of Ingredient	CAS Number	Standard	Publication Year
alpha-Amylcinnamaldehyde dimethyl acetal	91-87-2	Restriction	2023
Amylcyclopentenone	25564-22-1	Prohibition	2008
Angelica root oil	8015-64-3 84775-41-7	Restriction	2020
Anisyl alcohol	105-13-5 1331-81-3	Restriction	2020
Anisylidene acetone	943-88-4	Prohibition	2006
cis-and trans-Asarone	494-40-6 2883-98-9 5273-86-9	Prohibition Restriction	2006
Benzaldehyde	100-52-7	Restriction	2020
Benzene	71-43-2	Prohibition Specification	2004
Benzyl alcohol	100-51-6	Restriction	2020
Benzyl benzoate	120-51-4	Restriction	2020
Benzyl cinnamate	103-41-3	Restriction	2020
Benzyl cyanide	140-29-4	Prohibition Restriction	2004
Benzyl salicylate	118-58-1	Restriction	2020
Benzylidene acetone	122-57-6	Prohibition	2006
Bergamot oil expressed	8007-75-8 89957-91-5	Restriction	2020
Birch wood pyrolysate	8001-88-5 68917-50-0 84012-15-7 85251-66-7 85940-29-0 91745-85-6	Prohibition Specification	2013
alpha-Bisabolol	515-69-5 23089-26-1 23178-88-3 78148-59-1 76738-75-5 72691-24-8	Restriction	2020
Bitter orange peel oil expressed	68916-04-1 72968-50-4	Restriction	2020
Boldo oil	8022-81-9 84649-96-7	Prohibition	2009
Bromostyrene	103-64-0	Prohibition	2008
3-Bromo-1,7,7-trimethylbicyclo[2.2.1]heptane-2-one	76-29-9	Prohibition	2008
alpha-Butylcinnamaldehyde	7492-44-6	Restriction	2020



Name of Ingredient	CAS Number	Standard	Publication Year
4-tert-Butylcyclohexanone	98-53-3	Restriction	2023
1-(2-tert.-Butyl cyclohexyloxy)-2-butanol	139504-68-0	Restriction	2023
p-tert-Butyldihydrocinnamaldehyde	18127-01-0	Restriction	2020
p-tert-Butyl- $\alpha$ -methylhydrocinnamic aldehyde (p-BMHCA)	80-54-6	Restriction Prohibition	2020
p-tert-Butylphenol	98-54-4	Prohibition	2006
3-(m-tert-Butylphenyl)-2-methylpropionaldehyde (m-BMHCA)	62518-65-4	Restriction	2020
Cade oil	8013-10-3 90046-02-9	Prohibition Specification	2013
Carvomenthone	499-70-7 59471-80-6	Restriction	2023
Carvone	99-49-0 2244-16-8 6485-40-1	Restriction	2020
Carvone oxide	33204-74-9	Prohibition	2004
Carvyl acetate	97-42-7 1205-42-1 1134-95-8	Restriction	2023
Cedrene	11028-42-5 469-61-4 546-28-1	Restriction	2020
Chenopodium oil	8006-99-3 8024-11-1 89997-47-7	Prohibition	2008
Cinnamic alcohol	104-54-1	Restriction	2020
Cinnamic aldehyde	104-55-2	Restriction	2020
Cinnamic aldehyde dimethyl acetal	4364-06-1	Restriction	2020
Cinnamylidene acetone	4173-44-8	Prohibition	2008
Cinnamyl nitrile	1885-38-7 4360-47-8	Restriction	2020
Citral	5392-40-5 141-27-5 106-26-3	Restriction	2020
Citronellal	106-23-0 5949-05-3	Restriction	2020



Name of Ingredient	CAS Number	Standard	Publication Year
Citronellol	106-22-9 1117-61-9 26489-01-0 6812-78-8 141-25-3 7540-51-4	Restriction	2020
Citronellyl acetate	150-84-5 67601-05-2 141-11-7	Restriction	2023
Citrus oils and other furocoumarins containing essential oils	Not applicable.	Restriction	2020
Colophony	8050-09-7	Prohibition	2006
Costus root oil, absolute and concrete	8023-88-9 90106-55-1	Prohibition	2006
Coumarin	91-64-5	Restriction	2020
p-Cresol	106-44-5 1319-77-3	Restriction	2023
Cumin oil	8014-13-9 84775-51-9	Restriction	2020
Cuminaldehyde	122-03-2	Restriction	2020
Cyclamen alcohol	4756-19-8	Prohibition Specification	1980
Cyclamen aldehyde	103-95-7	Restriction Specification	2020
Cyclohexadecanone	2550-52-9	Restriction	2023
Cyclohexadecenone	88642-03-9 5365-06-0 2550-59-6 3100-36-5 5120-20-7 854373-71-0 854373-70-9	Restriction	2023
Cyclohexanemethanol, 2,4-dimethyl-	68480-15-9	Restriction	2020
alpha-Cyclohexylidene benzeneacetonitrile	10461-98-0	Restriction	2023
2-Cyclohexylidene-2-ortho-tolylacetonitrile	916887-53-1	Restriction	2023
Cyclopentadecanolide	106-02-5	Restriction	2020
Dibenzyl ether	103-50-4	Restriction	2020
2,2-Dichloro-1-methylcyclopropylbenzene	3591-42-2	Prohibition	2008



Name of Ingredient	CAS Number	Standard	Publication Year
2,4-Dienals	764-40-9	Prohibition	2013
	142-83-6		
	80466-34-8		
	5910-85-0		
	30361-28-5		
	6750-03-4		
	2363-88-4		
	13162-46-4		
	21662-16-8		
	25152-84-5		
	30361-29-6		
	4313-03-5		
	20432-40-0		
	4488-48-6		
	5577-44-6		
5910-87-2			
Diethyl maleate	141-05-9	Prohibition	2006
Dihydrocoumarin	119-84-6	Restriction	2023
2,4-Dihydroxy-3-methylbenzaldehyde	6248-20-0	Prohibition	2006
6,7-Dihydro-1,1,2,3,3-pentamethyl-4(5H)-indanone (DPMI)	33704-61-9	Restriction	2020
4,6-Dimethyl-8-tert-butylcoumarin	17874-34-9	Prohibition	2006
Dimethyl citraconate	617-54-9	Prohibition	2006
Dimethylcyclohex-3-ene-1-carbaldehyde (mixed isomers)	68737-61-1 (mixed isomers)	Restriction	2020
	68039-49-6		
	68039-48-5		
	27939-60-2		
	67801-65-4		
	36635-35-5		
	68084-52-6		
	35145-02-9		
1-(5,5-Dimethyl-1-cyclohexen-1-yl)pent-4-en-1-one	56973-85-4	Restriction	2020
4,8-Dimethyl-4,9-decadienal	71077-31-1	Restriction	2020
5,9-Dimethyl-4,8-decadienal	762-26-5	Restriction	2020
3,7-Dimethyl-2,6-nonadien-1-al	41448-29-7	Restriction	2020
3,7-Dimethyl-3,6-octadienal	55722-59-3	Restriction	2020
	1754-00-3		
	72203-98-6		
	72203-97-5		
3,7-Dimethyl-2-octen-1-ol	40607-48-5	Prohibition	2004
Dimethyl octenone	2550-11-0	Restriction	2023
2,2-Dimethyl-3-(3-tolyl)propan-1-ol	103694-68-4	Restriction Specification	2020



Name of Ingredient	CAS Number	Standard	Publication Year
3,3-Dimethyl-5-(2,2,3-trimethyl-3-cyclopenten-1-yl)-4-penten-2-ol	107898-54-4	Restriction	2020
Diphenylamine	122-39-4	Prohibition	2004
2,4-Dodecadien-1-ol, (2E, 4E)	18485-38-6	Prohibition	2015
Esters of 2-Nonynoic acid (except Methyl octine carbonate)	e.g.: 10031-92-2	Prohibition	2008
Esters of 2-Octynoic acid (except Methyl heptene carbonate)	e.g.: 10484-32-9 10519-20-7	Prohibition	2008
Estragole	140-67-0 1407-27-8 77525-18-9	Restriction	2023
(Ethoxymethoxy)-cyclododecane	58567-11-6	Restriction	2023
2-Ethoxy-4-methylphenol	2563-07-7	Restriction	2020
Ethyl acrylate	140-88-5	Prohibition	2006
p-Ethylbenzaldehyde	4748-78-1	Restriction	2020
Ethyl and Methyl furaneol	27538-09-6 27538-10-9	Restriction	2023
Ethyl isopropyl bicycloheptene-2-carboxylate	116044-44-1 116126-82-0	Restriction	2023
Ethylene glycol monoethyl ether and its acetate	110-80-5 (ether) 111-15-9 (acetate)	Prohibition	2004
Ethylene glycol monomethyl ether and its acetate	109-86-4 (ether) 110-49-6 (acetate)	Prohibition	2004
Eugenol	97-53-0	Restriction	2023
Farnesal	19317-11-4	Restriction	2020
Farnesol	4602-84-0 106-28-5 3790-71-4 16106-95-9 3879-60-5	Restriction Specification	2020
Fig leaf absolute	68916-52-9 90028-74-3	Prohibition	2006
Furfural	98-01-1	Restriction	2020
Furfuryl alcohol	98-00-0	Prohibition	2015
Furfurylidene acetone	623-15-4	Prohibition	2008
Geraniol	106-24-1	Restriction	2023
Geranyl nitrile	5146-66-7 5585-39-7 31983-27-4	Prohibition	2008



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Grapefruit oil expressed	8016-20-4 90045-43-5	Restriction	2020
trans-2-Heptenal	18829-55-5	Prohibition	2006
cis-3-Heptenyl acetate	1576-78-9	Restriction	2023
2-Heptylidene cyclopentan-1-one	39189-74-7	Restriction	2020
2,4-Hexadien-1-ol	111-28-4 17102-64-6	Prohibition	2015
Hexahydrocoumarin	700-82-3	Prohibition	2006
2-Hexenal	6728-26-3 505-57-7 16635-54-4	Restriction	2023
trans-2-Hexenal diethyl acetal	67746-30-9	Prohibition	2006
trans-2-Hexenal dimethyl acetal	18318-83-7	Prohibition	2006
cis-3-Hexenyl isovalerate	35154-45-1	Restriction	2023
5-Hexen-1-yl 2-methylbutanoate	155514-23-1	Restriction	2023
cis-3-Hexenyl methyl carbonate	67633-96-9	Restriction	2023
alpha-Hexyl cinnamic aldehyde	101-86-0	Restriction	2020
Hexyl salicylate	6259-76-3	Restriction	2020
alpha-Hexylidene cyclopentanone	17373-89-6	Restriction	2020
2-Hexylidenecyclohexan-1-one	16429-07-5	Restriction	2023
Hydroabietyl alcohol, Dihydroabietyl alcohol	13393-93-6 26266-77-3 1333-89-7	Prohibition	2004
Hydroquinone monoethyl ether	622-62-8	Prohibition	2006
Hydroquinone monomethyl ether	150-76-5	Prohibition	2006
4-Hydroxy-2,5-dimethyl-3(2H)-furanone	3658-77-3	Restriction	2020
6-Hydroxy-2,6-dimethylheptanal	62439-42-3	Restriction	2023
3 and 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene-1-carboxaldehyde (HMPCC)	31906-04-4 51414-25-6	Restriction	2020
Hydroxycitronellal	107-75-5	Restriction	2023
4-(4-Hydroxyphenyl)butan-2-one	5471-51-2	Restriction	2020
Isobutyl cinnamate	122-67-8	Restriction	2023
Isobutyl N-methylanthranilate	65505-24-0	Specification	2009
p-Isobutyl-alpha-methyl hydrocinnamaldehyde	6658-48-6	Restriction	2020
Isocyclocitral	1335-66-6 1423-46-7 67634-07-5	Restriction	2020
Isocyclogeraniol	68527-77-5	Restriction	2020
Isoeugenol	97-54-1 5932-68-3	Restriction	2020



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Isoeugenyl acetate	93-29-8	Restriction	2023
Isopentylcyclohexanone	16587-71-6	Restriction	2023
Isophorone	78-59-1	Prohibition Restriction	2020
p-Isopropylbenzyl alcohol	536-60-7	Restriction	2020
6-Isopropyl-2-decalol	34131-99-2	Prohibition	2006
cis,trans-4-(Isopropyl)cyclohexanemethanol	5502-75-0 13828-37-0 13674-19-6	Restriction	2020
4-(Isopropyl)-.beta.-methylcyclohexanethanol	67634-03-1	Restriction	2020
Jasmine absolute (grandiflorum)	8022-96-6 8024-43-9 90045-94-6 84776-64-7	Restriction	2020
Jasmine absolute (sambac)	91770-14-8 1034798-23-6	Restriction	2020
Lemon oil cold pressed	8008-56-8 84929-31-7	Restriction	2020
Lime oil expressed	8008-26-2 90063-52-8	Restriction	2020
Limonene	138-86-3 7705-14-8 5989-27-5 5989-54-8	Specification	1995
Linalool	78-70-6 126-90-9 126-91-0	Specification	2004
Longifolene	475-20-7 16846-09-6 19067-29-9	Restriction	2020
Massoia bark oil	85085-26-3	Prohibition	2008
Massoia lactone	54814-64-1 51154-96-2	Prohibition	2015
Melissa oil (genuine <i>Melissa officinalis</i> L.)	8014-71-9 84082-61-1	Restriction	2020
Menthadiene-7-methyl formate	68683-20-5	Restriction	2020
p-Methoxybenzaldehyde	123-11-5	Restriction	2023
o-Methoxycinnamaldehyde	1504-74-1	Restriction	2020
7-Methoxycoumarin	531-59-9	Prohibition Restriction	2008
Methoxycyclododecane	2986-54-1	Restriction	2023





Name of Ingredient	CAS Number	Standard	Publication Year
Methoxy dicyclopentadiene carboxaldehyde	86803-90-9	Restriction	2020
7-Methoxy-3,7-dimethyloct-1-ene	53767-86-5	Restriction	2023
4-Methoxy-alpha-methylbenzenepropanal	5462-06-6	Restriction	2023
2-Methoxy-4-methylphenol	93-51-6	Restriction	2020
2-Methoxy-4-propylphenol	2785-87-7	Restriction	2020
α-Methyl anisylidene acetone	104-27-8	Prohibition	2006
alpha-Methyl-1,3-benzodioxole-5-propionaldehyde (MMDHCA)	1205-17-0	Restriction	2020
alpha-Methyl cinnamic aldehyde	101-39-3	Restriction	2020
6-Methylcoumarin	92-48-8	Prohibition	2006
7-Methylcoumarin	2445-83-2	Prohibition	2006
Methyl crotonate	623-43-8	Prohibition	2006
4-Methyl-7-ethoxycoumarin	87-05-8	Prohibition	2006
Methyl eugenol	93-15-2	Restriction	2023
Methyl N-formylanthranilate	41270-80-8	Restriction Specification	2020
6-Methyl-3,5-heptadien-2-one	1604-28-0	Restriction	2020
Methyl heptine carbonate	111-12-6	Restriction	2020
p-Methylhydrocinnamic aldehyde	5406-12-2	Prohibition	2008
Methyl ionone, mixed isomers	1335-46-2 127-42-4 127-43-5 127-51-5 7779-30-8 79-89-0 1335-94-0	Restriction Specification	2020
Methyl lavender ketone	67801-33-6 67633-95-8	Restriction	2023
Methyl methacrylate	80-62-6	Prohibition	2008
Methyl N-methylantranilate	85-91-6	Restriction Specification	2023
Methyl beta-naphthyl ketone	93-08-3	Restriction	2020
3-Methyl-2(3)-nonenenitrile	53153-66-5	Prohibition	2008
Methyl octine carbonate	111-80-8	Restriction	2020
2-Methyl-2-pentenal	623-36-9	Restriction	2023
3-Methyl-2-(pentyloxy)cyclopent-2-en-1-one	68922-13-4	Restriction	2020
3-Methyl-5-phenylpent-2-enenitrile	93893-89-1 53243-59-7 53243-60-0	Restriction	2023



Name of Ingredient	CAS Number	Standard	Publication Year
4-Methyl-1-propan-2-ylbicyclo[2.2.2]oct-2-ene-8-carboxylate	68966-86-9	Restriction	2023
p-Methyltetrahydroquinoline	91-61-2	Specification	2009
Methyl vanillyl ether	5533-03-9	Restriction	2023
Mintlactone	13341-72-5 38049-04-6	Prohibition	2021
Musk alpha	63697-53-0	Prohibition	2008
Musk ambrette	83-66-9	Prohibition	2006
Musk ketone	81-14-1	Specification	2010
Musk KS	62265-99-0	Prohibition	2008
Musk moskene	116-66-5	Prohibition	2008
Musk tibetene	145-39-1	Prohibition	2008
Musk xylene	81-15-2	Prohibition	2009
Myraldyl acetate	72403-67-9	Restriction	2023
Nitrobenzene	98-95-3	Prohibition	2006
cis-3-Nonenyl acetate	13049-88-2	Restriction	2023
2-Nonyn-1-yl dimethyl acetal	13257-44-8	Restriction	2020
Nootkatone	4674-50-4	Specification	2006
Oakmoss extracts	90028-68-5 68917-10-2 9000-50-4	Restriction Specification	2020
2,5-Octadien-4-one, 5,6,7-trimethyl-, (2E)-	358331-95-0 357650-26-1 847144-75-6	Restriction	2023
Octahydro-dimethylnaphthalene-2-carbaldehyde (mixed isomers)	68738-94-3 68738-96-5 68991-96-8 68991-97-9	Restriction	2023
1-(1,2,3,4,5,6,7,8 Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl) ethanone (OTNE)	54464-57-2 54464-59-4 68155-66-8 68155-67-9	Restriction	2020
2-Octen-4-one	4643-27-0	Restriction	2023
3-Octen-2-one	1669-44-9	Restriction	2023
1-Octen-3-yl acetate	2442-10-6	Restriction	2020
Opoponax	8021-36-1 9000-78-6 93384-32-8	Restriction Specification	2020
1-(2,4,4,5,5-Pentamethyl-1-cyclopenten-1-yl)ethan-1-one	13144-88-2	Restriction	2020



Name of Ingredient	CAS Number	Standard	Publication Year
3,4,5,6,6-Pentamethylhept-3-en-2-one	81786-75-6 81786-73-4 86115-11-9 81786-74-5	Restriction	2023
2-Pentylidene cyclohexanone	25677-40-1	Prohibition	2006
Perilla aldehyde	2111-75-3	Restriction	2020
Peru balsam	8007-00-9	Restriction Prohibition	2020
Phenoxyacetaldehyde	2120-70-9	Restriction	2023
Phenylacetaldehyde	122-78-1	Restriction	2020
Phenyl acetone	103-79-7	Prohibition	2008
Phenyl benzoate	93-99-2	Prohibition	2008
3-Phenylbutanal	16251-77-7	Restriction	2020
4-Phenyl-3-buten-2-ol	17488-65-2	Restriction	2020
2-Phenylpropionaldehyde	93-53-8 1340-11-0 34713-70-7	Restriction	2020
Pinacea derivatives	Not applicable.	Specification	1994
Propenylguaethol	94-86-0 63477-41-8	Restriction	2020
3-Propylidenephthalide	17369-59-4	Restriction	2023
Pseudoionone	141-10-6	Prohibition Specification	2006
Pseudo methylionones	26651-96-7 72968-25-3 1117-41-5	Prohibition Specification	2009
Quinoline	91-22-5	Prohibition	2010



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Rose ketones	23696-85-7 23726-93-4 59739-63-8 43052-87-5 24720-09-0 23726-94-5 23726-92-3 23726-91-2 35044-68-9 57378-68-4 71048-82-3 35087-49-1 39872-57-6 70266-48-7 33673-71-1 87064-19-5	Restriction	2020
Rue oil	8014-29-7 84929-47-5	Restriction	2020
Safrole, Isosafrole and Dihydrosafrole	94-59-7 120-58-1 94-58-6	Prohibition Restriction	1987
Santolina oil	84961-58-0	Prohibition	2008
Savin oil	8024-00-8 90046-04-1 68916-94-9 90046-03-0	Prohibition Specification	1982
Sclareol	515-03-7	Specification	2005
Styrax	8046-19-3 8024-01-9 94891-27-7 94891-28-8 101227-15-0	Prohibition Restriction Specification	2020
Tagetes oil and absolute	90131-43-4 8016-84-0 91722-29-1 8016-84-0 91770-75-1	Prohibition Restriction Specification	2020
Tea leaf absolute	84650-60-2	Restriction	2020
1,2,3,4-Tetrahydro-4-methylquinoline	19343-78-3	Specification	2009
Tetramethyl bicyclo-2-heptene-2-propionaldehyde	33885-52-8	Restriction	2023
alpha,2,2,3-Tetramethylcyclopent-3-ene-1-butylaldehyde	65114-03-6	Restriction	2020
2,4,4,7-Tetramethyl-6-octen-3-one	74338-72-0	Restriction	2023



Name of Ingredient	CAS Number	Standard	Publication Year
Thujone	546-80-5 471-15-8 76231-76-0 1125-12-8	Restriction	2020
o,m,p-Tolualdehydes and their mixtures	529-20-4 620-23-5 104-87-0 1334-78-7	Restriction	2020
Toluene	108-88-3	Prohibition Specification	2004
p-Tolyl alcohol	589-18-4	Restriction	2020
Treemoss extracts	90028-67-4 68648-41-9 68917-40-8	Restriction Specification	2020
2,6,6-Trimethylcyclohex-1,3-dienyl methanal	116-26-7	Restriction	2020
1-(2,2,6-Trimethylcyclohexyl)-3-hexanol	70788-30-6	Restriction	2023
1-(2,2,6-Trimethylcyclohexyl)-3-pentanol	60241-52-3 60241-53-4	Restriction	2023
5-(2,2,3-Trimethyl-3-cyclopentenyl)-3-methylpentan-2-ol	65113-99-7	Restriction	2020
3,6,7-Trimethyl-2,6-octadienal	1891-67-4	Restriction	2023
2,6,10-Trimethylundeca-5,9-dien-1-ol	24048-14-4 185019-19-6 58001-88-0 58001-87-9 1373932-23-0 1018832-07-9	Restriction	2020
Verbena oil and absolute ( <i>Lippia citriodora</i> Kunth.)	8024-12-2 85116-63-8	Restriction Prohibition	2020
Woody furan	338735-71-0 351343-77-6	Restriction	2023
Ylang ylang extracts	8006-81-3 68606-83-7 83863-30-3	Restriction	2020