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IFRA 51 Conformity Certificate

Organic Neroli Essential Oil

(*Citrus aurantium var amara*)

1. IFRA 51th Amendment PROHIBITION substances

Ingredient Name	CAS number	Total %
Acetyl ethyl tetramethyl tetralin (AETT)	88-29-9	
Acetyl isovaleryl	13706-86-0	
Alantroot oil	84012-20-4 97676-35-2	
Allyl heptine carbonate	73157-43-4	
Allyl isothiocyanate	57-06-7	
Amylcyclopentenone	25564-22-1	
Anisylidene acetone	943-88-4	
Benzylidene acetone	122-57-6	
Boldo oil	8022-81-9 84649-96-7	
3-Bromo-1,7,7-trimethylbicyclo[2.2.1]heptane-2-one	76-29-9	
Bromostyrene	103-64-0	
p-tert-Butylphenol	98-54-4	
Carvone oxide	33204-74-9	
Chenopodium oil	8006-99-3 8024-11-1 89997-47-7	
Cinnamylidene acetone	4173-44-8	
Colophony	8050-09-7	
Costus root oil, absolute and concrete	8023-88-9 90106-55-1	
Musk alpha	63697-53-0	
Musk KS	62265-99-0	
2,2-Dichloro-1-methylcyclopropylbenzene	3591-42-2	
2,4-Dienals	764-40-9 142-83-6 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	
2,4-Dihydroxy-3-methylbenzaldehyde	6248-20-0	
4,6-Dimethyl-8-tert-butylcoumarin	17874-34-9	
3,7-Dimethyl-2-octen-1-ol	40607-48-5	
Dimethyl citraconate	617-54-9	
Diphenylamine	122-39-4	
2,4-Dodecadien-1-ol, (2E, 4E)	18485-38-6	
Esters of 2-Nonynoic acid (except Methyl octine carbonate)	e.g.:10031-92-2	
Esters of 2-Octynoic acid (except Methyl heptine carbonate)	e.g.:10484-32-910519-20-7	
Ethyl acrylate	140-88-5	
Ethylene glycol monoethyl ether and its acetate	110-80-5 (ether)111-15-9 (acetate)	
Ethylene glycol monomethyl ether and its acetate	109-86-4 (ether)110-49-6 (acetate)	
Fig leaf absolute	68916-52-990028-74-3	

Furfuryl alcohol	98-00-0	
Furfurylidene acetone	623-15-4	
Geranyl nitrile	5146-66-75585-39-731983-27-4	
trans-2-Heptenal	18829-55-5	
2,4-Hexadien-1-ol	111-28-417102-64-6	
Hexahydrocoumarin	700-82-3	
trans-2-Hexenal diethyl acetal	67746-30-9	
trans-2-Hexenal dimethyl acetal	18318-83-7	
Hydroabietyl alcohol, Dihydroabietyl alcohol	13393-93-626266-77-31333-89-7	
Hydroquinone monoethyl ether	622-62-8	
Hydroquinone monomethyl ether	150-76-5	
6-Isopropyl-2-decalol	34131-99-2	
Massoia bark oil	85085-26-3	
Massoia lactone	54814-64-151154-96-2	
α -Methyl anisylidene acetone	104-27-8	
6-Methylcoumarin	92-48-8	
7-Methylcoumarin	2445-83-2	
Methyl crotonate	623-43-8	
4-Methyl-7-ethoxycoumarin	87-05-8	
p-Methylhydrocinnamic aldehyde	5406-12-2	
Methyl methacrylate	80-62-6	
3-Methyl-2(3)-nonenenitrile	53153-66-5	
Musk moskene	116-66-5	
Musk ambrette	83-66-9	
Musk tibetene	145-39-1	
Musk xylene	81-15-2	
Nitrobenzene	98-95-3	
2-Pentylidene cyclohexanone	25677-40-1	
Phenyl acetone	103-79-7	
Phenyl benzoate	93-99-2	
Quinoline	91-22-5	
Santolina oil	84961-58-0	
Mintlactone	13341-72-538049-04-6	
3-Acetyl-2,5-dimethylfuran	10599-70-9	

2. IFRA 51th Amendment RESTRICTION/PROHIBITION substances

Ingredient Name	CAS number	% Total
p-tert-Butyl- α -methylhydrocinnamic aldehyde (p-BMHCA)	80-54-6	
Peru balsam	8007-00-9	
Verbena oil and absolute (Lippia citriodora Kunth.)	8024-12-2	
	85116-63-8	
cis-and trans-Asarone	494-40-6	
	2883-98-9	
	5273-86-9	
Benzyl cyanide	140-29-4	
Isophorone	78-59-1	
7-Methoxycoumarin	531-59-9	
Safrole, Isosafrole and Dihydrosafrole	94-59-7	
	120-58-1	
	94-58-6	

3. IFRA 51th Amendment PROHIBITION/SPECIFICATION substances

Ingredient Name	CAS number	% Total
Benzene	71-43-2	
Birch wood pyrolysate	8001-88-5	
	68917-50-0	
	84012-15-7	
	85251-66-7	
	85940-29-0	
	91745-85-6	
Cade oil	8013-10-390046-02-9	
Cyclamen alcohol	4756-19-8	
Pseudoionone	141-10-6	
Pseudo methylionones	26651-96-772968-25-31117-41-5	

Savin oil	Prohibition of Savin oil: 8024-00-8 90046-04-1 Specification of Savin oil: 68916-94-9 90046-03-0	
Toluene	108-88-3	

4. IFRA 51th Amendment PROHIBITION/RESTRICTION/SPECIFICATION substances

Ingredient Name	CAS number	% Total
Styrax	8046-19-3 8024-01-9 94891-27-7 94891-28-8 101227-15-0	
Tagetes oil and absolute	Prohibition of Tagetes erecta: 90131-43-4 8016-84-0 Restriction and Specification of Tagetes patula and Tagetes minuta: 91722-29-1 8016-84-0 91770-75-1	

5. IFRA 51th Amendment RESTRICTION substances

Ingredient Name	CAS number	% Total
Acetic acid, anhydride, reaction products with 1,5,10-Trimethyl-1,5,9-cyclododecatriene	144020-22-4 28371-99-5	
Acetylated Vetiver oil	84082-84-8 68917-34-0 73246-97-6 62563-80-8	
alpha-Amyl cinnamic alcohol	101-85-9	
alpha-Amyl cinnamic aldehyde	122-40-7	
Anisyl alcohol	105-13-5 1331-81-3	
Benzaldehyde	100-52-7	
Benzyl alcohol	100-51-6	
Benzyl benzoate	120-51-4	
Benzyl cinnamate	103-41-3	
Benzyl salicylate	118-58-1	
alpha-Butylcinnamaldehyde	7492-44-6	
3-(m-tert-Butylphenyl)-2-methylpropionaldehyde (m-BMHCA)	62518-65-4	
p-tert-Butyldihydrocinnamaldehyde	18127-01-0	
Carvone	99-49-0 2244-16-8 6485-40-1	
Cinnamic alcohol	104-54-1	
Cinnamic aldehyde	104-55-2	
Cinnamic aldehyde dimethyl acetal	4364-06-1	
Cinnamyl nitrile	1885-38-7 4360-47-8	
Citral	5392-40-5 141-27-5 106-26-3	
Citronellol	106-22-9 1117-61-9 26489-01-0 6812-78-8 141-25-3 7540-51-4	
Coumarin	91-64-5	
Cuminaldehyde	122-03-2	
Cyclopentadecanolide	106-02-5	

Dibenzyl ether	103-50-4	
6,7-Dihydro-1,1,2,3,3-pentamethyl-4(5H)-indanone (DPMI)	33704-61-9	
Dihydrocoumarin	119-84-6	
Dimethylcyclohex-3-ene-1-carbaldehyde (mixed isomers)	68737-61-1 (mixed isomers) 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	
2-Ethoxy-4-methylphenol	2563-07-7	
p-Ethylbenzaldehyde	4748-78-1	
Eugenol	97-53-0	
Geraniol	106-24-1	1.0 – 6.0
2-Heptylidene cyclopentan-1-one	39189-74-7	
2-Hexenal	505-57-7 6728-26-3 16635-54-4	
alpha-Hexyl cinnamic aldehyde	101-86-0	
alpha-Hexylidene cyclopentanone	17373-89-6	
Hexyl salicylate	6259-76-3	
Hydroxycitronellal	107-75-5	
3 and 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene-1-carboxaldehyde (HMPCC)	31906-04-4 51414-25-6	
p-Isobutyl-alpha-methyl hydrocinnamaldehyde	6658-48-6	
Isocyclocitral	1335-66-6 1423-46-7 67634-07-5	
Isocyclogeraniol	68527-77-5	
Isoeugenol	97-54-1 5932-68-3	
Jasmine absolute (grandiflorum)	8022-96-6 8024-43-9 90045-94-6 84776-64-7	
Jasmine absolute (sambac)	91770-14-8 1034798-23-6	
Melissa oil (genuine Melissa officinalis L.)	8014-71-9 84082-61-1	
Perilla aldehyde	2111-75-3	
Menthadiene-7-methyl formate	68683-20-5	
p-Methoxybenzaldehyde	123-11-5	
o-Methoxycinnamaldehyde	1504-74-1	
Methoxy dicyclopentadiene carboxaldehyde	86803-90-9	
4-Methoxy-alpha-methylbenzenepropanal	5462-06-6	
2-Methoxy-4-methylphenol	93-51-6	
alpha-Methyl-1,3-benzodioxole-5-propionaldehyde (MMDHCA)	1205-17-0	
alpha-Methyl cinnamic aldehyde	101-39-3	
6-Methyl-3,5-heptadien-2-one	1604-28-0	
Methyl heptene carbonate	111-12-6	
Methyl octene carbonate	111-80-8	
3-Methyl-2-(pentyloxy)cyclopent-2-en-1-one	68922-13-4	
2-Nonyn-1-al dimethyl acetal	13257-44-8	
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	
1-Octen-3-yl acetate	2442-10-6	
1-(2,4,4,5,5-Pentamethyl-1-cyclopenten-1-yl)ethan-1-one	13144-88-2	
Phenylacetaldehyde	122-78-1	
3-Phenylbutanal	16251-77-7	
2-Phenylpropionaldehyde	93-53-8 1340-11-0 34713-70-7	
3-Propylidenephthalide	17369-59-4	

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	
Tea leaf absolute	84650-60-2	
o,m,p-Tolualdehydes and their mixtures	529-20-4 620-23-5 104-87-0 1334-78-7	
2,6,6-Trimethylcyclohex-1,3-dienyl methanal	116-26-7	
Ylang ylang extracts	8006-81-3 68606-83-7 83863-30-3	
Acetyl hexamethyl indan (AHMI)	15323-35-0	
Angelica root oil	8015-64-3 84775-41-7	
Bergamot oil expressed	8007-75-8 89957-91-5	
Bitter orange peel oil expressed	68916-04-1 72968-50-4	
Citrus oils and other furocoumarins containing essential oils	Not applicable.	Detected
Cumin oil	8014-13-9 84775-51-9	
Grapefruit oil expressed	8016-20-4 90045-43-5	
Lemon oil cold pressed	8008-56-8 84929-31-7	
Lime oil expressed	8008-26-2 90063-52-8	
Methyl beta-naphthyl ketone	93-08-3	
Rue oil	8014-29-7 84929-47-5	
Furfural	98-01-1	
Estragole	140-67-0 1407-27-8 77525-18-9	
Methyl eugenol	93-15-2	
Thujone	546-80-5 471-15-8 76231-76-0 1125-12-8	
Propenylguaethol	94-86-0 63477-41-8	
2-Methoxy-4-propylphenol	2785-87-7	
alpha-Bisabolol	515-69-5 23089-26-1 23178-88-3 78148-59-1 76738-75-5 72691-24-8	
p-Tolyl alcohol	589-18-4	
p-Isopropylbenzyl alcohol	536-60-7	

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	
Cedrene	11028-42-5 469-61-4 546-28-1	
4-Phenyl-3-buten-2-ol	17488-65-2	
Longifolene	475-20-7 16846-09-6 19067-29-9	
4-Hydroxy-2,5-dimethyl-3(2H)-furanone	3658-77-3	
Farnesal	19317-11-4	
3,7-Dimethyl-2,6-nonadien-1-al	41448-29-7	
5,9-Dimethyl-4,8-decadienal	762-26-5	
3,7-Dimethyl-3,6-octadienal	55722-59-3 1754-00-3 72203-98-6 72203-97-5	
Citronellal	106-23-0 5949-05-3	
4,8-Dimethyl-4,9-decadienal	71077-31-1	
cis,trans-4-(Isopropyl)cyclohexanemethanol	5502-75-0 13828-37-0 13674-19-6	
4-(Isopropyl)-.beta.-methylcyclohexanemethanol	67634-03-1	
Cyclohexanemethanol, 2,4-dimethyl-	68480-15-9	
3,3-Dimethyl-5-(2,2,3-trimethyl-3-cyclopenten-1-yl)-4-penten-2-ol	107898-54-4	
5-(2,2,3-Trimethyl-3-cyclopentenyl)-3-methylpentan-2-ol	65113-99-7	
alpha,2,2,3-Tetramethylcyclopent-3-ene-1-butyraldehyde	65114-03-6	
4-(4-Hydroxyphenyl)butan-2-one	5471-51-2	
Ethyl isopropyl bicycloheptene-2-carboxylate	116044-44-1 116126-82-0	
Tetramethyl bicyclo-2-heptene-2-propionaldehyde	33885-52-8	
1-(2,2,6-Trimethylcyclohexyl)-3-hexanol	70788-30-6	
1-(2-tert.-Butyl cyclohexyloxy)-2-butanol	139504-68-0	
3,6,7-Trimethyl-2,6-octadienal	1891-67-4	
2,4,4,7-Tetramethyl-6-octen-3-one	74338-72-0	
2-Cyclohexylidene-2-ortho-tolylacetone	916887-53-1	
Ethyl and Methyl furaneol	27538-09-6 27538-10-9	
2-Hexylidenecyclohexan-1-one	16429-07-5	
2-Methyl-2-pentenal	623-36-9	
2-Octen-4-one	4643-27-0	
Methyl lavender ketone	67801-33-6 67633-95-8	
3,4,5,6,6-Pentamethylhept-3-en-2-one	81786-75-6 81786-73-4 86115-11-9 81786-74-5	
3-Methyl-5-phenylpent-2-enenitrile	93893-89-1 53243-59-7 53243-60-0	
3-Octen-2-one	1669-44-9	
Dimethyl octenone	2550-11-0	
Isopentylcyclohexanone	16587-71-6	
Woody furan	338735-71-0 351343-77-6	
alpha-Amylcinnamaldehyde diethyl acetal	60763-41-9	
alpha-Amylcinnamaldehyde dimethyl acetal	91-87-2	
alpha-Cyclohexylidene benzeneacetone	10461-98-0	
5-Hexen-1-yl 2-methylbutanoate	155514-23-1	
Carvyl acetate	97-42-7 1205-42-1 1134-95-8	

cis-3-Heptenyl acetate	1576-78-9	
cis-3-Hexenyl isovalerate	35154-45-1	
cis-3-Hexenyl methyl carbonate	67633-96-9	
cis-3-Nonenyl acetate	13049-88-2	
Citronellyl acetate	150-84-5 67601-05-2 141-11-7	
Cyclohexadecanone	2550-52-9	
Cyclohexadecenone	88642-03-9 5365-06-0 2550-59-6 3100-36-5 5120-20-7 854373-71-0 854373-70-9	
1-(2,2,6-Trimethylcyclohexyl)-3-pentanol	60241-52-3 60241-53-4	
(Ethoxymethoxy)-cyclododecane	58567-11-6	
6-Hydroxy-2,6-dimethylheptanal	62439-42-3	
Isobutyl cinnamate	122-67-8	
Isoeugenyl acetate	93-29-8	
4-Methyl-1-propan-2-ylbicyclo[2.2.2]oct-2-ene-8-carboxylate	68966-86-9	
Methyl vanillyl ether	5533-03-9	
Myraldyl acetate	72403-67-9	
Octahydro-dimethylnaphthalene-2-carbaldehyde (mixed isomers)	68738-94-3 68738-96-5 68991-96-8 68991-97-9	
p-Cresol	106-44-5 1319-77-3	
Phenoxyacetaldehyde	2120-70-9	
Carvomenthone	499-70-7 59471-80-6	
4-tert-Butylcyclohexanone	98-53-3	
7-Methoxy-3,7-dimethyloct-1-ene	53767-86-5	
Methoxycyclododecane	2986-54-1	
2,5-Octadien-4-one, 5,6,7-trimethyl-, (2E)-	358331-95-0 357650-26-1 847144-75-6	

6. IFRA 51th Amendment RESTRICTION/SPECIFICATION substances

Ingredient Name	CAS number	% Total
Allyl phenoxyacetate	7493-74-5 863306-60-9	
Cyclamen aldehyde	103-95-7	
2,2-Dimethyl-3-(3-tolyl)propan-1-ol	103694-68-4	
Farnesol	4602-84-0 106-28-5 3790-71-4 16106-95-9 3879-60-5	0.5 – 4.0
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	
Oakmoss extracts	90028-68-5 68917-10-2 9000-50-4	
Opoponax	8021-36-1 9000-78-6 93384-32-8	

Treemoss extracts	90028-67-4 68648-41-9 68917-40-8	
Methyl N-methylantranilate	85-91-6	0.0 – 0.1
Methyl N-formylantranilate	41270-80-8	0.01 – 0.1
Allyl 3-cyclohexylpropionate	2705-87-5	

7. IFRA 51th Amendment SPECIFICATION substances

Ingredient Name	CAS number	% Total
Sclareol	515-03-7	
Pinacea derivatives	Not applicable.	
Nootkatone	4674-50-4	
Limonene	138-86-3 7705-14-8 5989-27-5 5989-54-8	7.0 – 17.0
Linalool	78-70-6 126-90-9 126-91-0	26 – 55
Allyl esters	Not applicable.	
Musk ketone	81-14-1	
Isobutyl N-methylantranilate	65505-24-0	
p-Methyltetrahydroquinoline	91-61-2	
1,2,3,4-Tetrahydro-4-methylquinoline	19343-78-3	