

PRODUCT INFORMATION

IFRA 51TH AMENDMENT DECLARATION

Product Name : N-HEXANAL

Product Code : 441H037500

Natura can confirm that the above named product is included in the IFRA Transparency list [66-25-1] ; its use is subject to the current IFRA Standards.

Additional substances are not added during the manufacturing process of this product.

Name	CAS	% Direct (added as such)	% from Naturals	% Impurities (from synthetics)	% Total
Acetic acid, anhydride, reaction products with 1,5,10-trimethyl-1,5,9-cyclododecatriene	144020-22-4, 28371-99-5				NONE
Acetyl hexamethyl indan (AHMI) (Phantolide)	15323-35-0				NONE
Allyl esters	Various				NONE
Allyl Phenoxyacetate	7493-74-5, 863306-60-9				NONE
Asarone, cis- and trans- (from naturals)	494-40-6, 5273-86-9, 2883-98-9				NONE
Benzaldehyde	100-52-7				NONE
Benzene (as impurity only)	71-43-2				NONE
Benzyl cyanide (from naturals)	140-29-4				NONE
α -Bisabolol	515-69-5, 23089-26-1, 23178-88-3, 78148-59-1, 76738-75-5, 72691-24-8				NONE
α -Butylcinnamaldehyde	7492-44-6				NONE
p-tert-Butyldihydrocinnamaldehyde, (Bourgeonal)	18127-01-0				NONE
3-(m-tert-Butylphenyl)-2-methylpropionaldehyde (m-BMHCA)	62518-65-4				NONE
Carvone	99-49-0, 2244-16-8, 6485-40-1				NONE

Cedrene	11028-42-5, 469-61-4, 546-28-1				NONE
Cinnamic aldehyde dimethyl acetal	4364-06-1				NONE
Cinnamyl nitrile	1885-38-7, 4360-47-8				NONE
Citronellal	106-23-0, 5949-05-3				NONE
Cuminaldehyde	122-03-2				NONE
Cyclamen alcohol (in cyclamen aldehyde only)	4756-19-8				NONE
Cyclamen aldehyde	103-95-7				NONE
Cyclohexanemethanol, 2,4-dimethyl-	68480-15-9				NONE
Cyclopentadecanolide	106-02-5				NONE
Damascenone	23696-85-7, 23726-93-4				NONE
Damascenone beta	59739-63-8				NONE
Damascone alpha	43052-87-5, 24720-09-0, 23726-94-5				NONE
Damascone beta	23726-92-3, 23726-91-2, 35044-68-9				NONE
Damascone delta	57378-68-4, 71048-82-3				NONE
Damascone gamma	35087-49-1				NONE
Damascone Iso	39872-57-6, 33673-71-1, 70266-48-7, 87064-19-5				NONE
Dibenzyl ether	103-50-4				NONE
6,7-Dihydro-1,1,2,3,3-pentamethyl-4(5H)-indanone (DPMI)	33704-61-9				NONE
Dihydrocoumarin	119-84-6				NONE
Dimethylcyclohex-3-ene-1-carboxaldehyde (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				NONE
1-(5,5-Dimethyl-1-cyclohexen-1-yl)pent-4-en-1-one	56973-85-4				NONE
4,8-Dimethyl-4,9-decadienal	71077-31-1				NONE
5,9-Dimethyl-4,8-decadienal	762-26-5				NONE
3,7-Dimethyl-2,6-nonadien-1-al	41448-29-7				NONE
3,7-Dimethyl-3,6-octadienal	55722-59-3, 1754-00-3, 72203-98-6, 72203-97-5				NONE

2,2-Dimethyl-3-(3-tolyl)propan-1-ol (Majantol)	103694-68-4				NONE
3,3-Dimethyl-5-(2,2,3-trimethyl-3-cyclopenten-1-yl)-4-penten-2-ol	107898-54-4				NONE
Estragole	140-67-0, 1407-27-8, 77525-18-9				NONE
2-Ethoxy-4-methylphenol	2563-07-7				NONE
p-Ethylbenzaldehyde	4748-78-1				NONE
Farnesal	19317-11-4				NONE
Furfural	98-01-1				NONE
2-Heptylidene cyclopentan-1-one	39189-74-7				NONE
trans-2-Hexenal	6728-26-3				NONE
Hexyl salicylate	6259-76-3				NONE
α -Hexylidene cyclopentanone	17373-89-6				NONE
4-Hydroxy-2,5-dimethyl-3(2H)-furanone	3658-77-3				NONE
4-(4-Hydroxyphenyl)butan-2-one	5471-51-2				NONE
Isobutyl N-methylantranilate	65505-24-0				NONE
p-Isobutyl- α -methyl Hydrocinnamaldehyde	6658-48-6				NONE
Isocyclocitral	1335-66-6, 1423-46-7, 67634-07-5				NONE
Isocyclogeraniol	68527-77-5				NONE
Isophorone (from naturals)	78-59-1				NONE
p-Isopropylbenzyl alcohol	536-60-7				NONE
cis,trans-4-(Isopropyl) cyclohexanemethanol	5502-75-0, 13828-37-0, 13674-19-6				NONE
4-(Isopropyl)- β -methylcyclohexanethanol	67634-03-1				NONE
Longifolene	475-20-7, 16846-09-6, 19067-29-9				NONE
Menthadiene-7-methyl formate (Isobergamate)	68683-20-5				NONE
p-Methoxybenzaldehyde	123-11-5				NONE
o-Methoxycinnamaldehyde	1504-74-1				NONE
7-Methoxycoumarin (from naturals)	531-59-9				NONE
Methoxy dicyclopentadiene carboxaldehyde	86803-90-9				NONE
4-Methoxy- α -methylbenzenepropanal	5462-06-6				NONE
2-Methoxy-4-methylphenol (Creosol)	93-51-6				NONE
2-Methoxy-4-propylphenol	2785-87-7				NONE
α -Methyl-1,3-benzodioxole-5-propionaldehyde (MMDHCA) (Helional)	1205-17-0				NONE
α -Methyl cinnamic aldehyde	101-39-3				NONE

Methyl eugenol	93-15-2				NONE
Methyl N-formylanthranilate	41270-80-8				NONE
6-Methyl-3,5-heptadien-2-one	1604-28-0				NONE
Methyl ionones, mixed isomers	1335-46-2, 127-42-4, 127-43-5, 127-51-5, 7779-30-8, 79-89-0, 1335-94-0				NONE
Methyl N-methylantranilate	85-91-6				NONE
Methyl β -naphthyl ketone	93-08-3				NONE
Methyl octine carbonate	111-80-8				NONE
3-Methyl-2-(pentyloxy)cyclopent-2-en-1-one	68922-13-4				NONE
p-Methyltetrahydroquinoline	91-61-2				NONE
Musk ketone	81-14-1				NONE
2-Nonyl-1-al dimethyl acetal	13257-44-8				NONE
Nootkatone	4674-50-4				NONE
1-(1,2,3,4,5,6,7,8 Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl) ethanone (OTNE) (Iso E Super)	54464-57-2, 54464-59-4, 68155-66-8, 68155-67-9				NONE
1-Octen-3-yl acetate	2442-10-6				NONE
1-(2,4,4,5,5-Pentamethyl-1-cyclopenten-1-yl) ethan-1-one	13144-88-2				NONE
Perilla aldehyde	2111-75-3				NONE
Phenyl acetaldehyde	122-78-1				NONE
3-Phenylbutanal	16251-77-7				NONE
4-Phenyl-3-buten-2-ol	17488-65-2				NONE
2-Phenylpropionaldehyde	93-53-8, 1340-11-0, 34713-70-7				NONE
Propenylguaethol	94-86-0, 63477-41-8				NONE
3-Propylidenephthalide	17369-59-4				NONE
Pseudoionone (as impurity in ionones)	141-10-6				NONE
Pseudomethylionone (as impurity from methylionones)	26651-96-7, 72968-25-3, 1117-41-5				NONE
Safrol, Isosafrole and Dihydrosafrole (from naturals)	94-59-7, 120-58-1, 94-58-6				NONE
Sclareol	515-03-7				NONE
1,2,3,4-Tetrahydro-4-methylquinoline	19343-78-3				NONE
α -2,2,3-Tetramethylcyclopent-3-ene-1-butylaldehyde	65114-03-6				NONE
Thujone	546-80-5, 471-15-8, 76231-76-0, 1125-12-8				NONE

o, m, p-Tolualdehydes and their mixtures	529-20-4, 620-23-5, 104-87-0, 1334-78-7				NONE
Toluene (from naturals or as an impurity)	108-88-3				NONE
p-Tolyl alcohol	589-18-4				NONE
2,6,6-Trimethylcyclohex-1,3-dienyl methanol (Safranal)	116-26-7				NONE
5-(2,2,3-Trimethyl-3-cyclopentenyl)-3-methylpentan-2-ol	65113-99-7				NONE
2,6,10-Trimethylundeca-5,9-dienol	24048-14-4, 185019-19-6, 58001-87-9, 58001-88-0, 1373932-23-0, 1018832-07-9				NONE
Ethyl isopropyl bicycloheptene-2-carboxylate	116044-44-1 116126-82-0				NONE
Tetramethyl bicyclo-2-heptene-2-propionaldehyde	33885-52-8				NONE
1-(2,2,6-Trimethylcyclohexyl)-3-hexanol	70788-30-6				NONE
1-(2-tert.-Butyl cyclohexyloxy)-2-butanol	139504-68-0				NONE
3,6,7-Trimethyl-2,6-octadienal	1891-67-4				NONE
2,4,4,7-Tetramethyl-6-octen-3-one	74338-72-0				NONE
2-Cyclohexylidene-2-ortho-tolylacetonitrile	916887-53-1				NONE
Ethyl and Methyl furaneol	27538-09-6 27538-10-9				NONE
2-Hexylidenecyclohexan-1-one	16429-07-5				NONE
2-Methyl-2-pentenal	623-36-9				NONE
2-Octen-4-one	4643-27-0				NONE
Methyl lavender ketone	67801-33-6 67633-95-8				NONE
3,4,5,6,6-Pentamethylhept-3-en-2-one	81786-75-6 81786-73-4 86115-11-9 81786-74-5				NONE
3-Methyl-5-phenylpent-2-enenitrile	93893-89-1 53243-59-7 53243-60-0				NONE
3-Octen-2-one	1669-44-9				NONE
Dimethyl octenone	2550-11-0				NONE
Isopentylcyclohexanone	16587-71-6				NONE
Woody furan	338735-71-0 351343-77-6				NONE
Allyl 3-cyclohexylpropionate	2705-87-5				NONE
alpha-Amylcinnamaldehyde diethyl acetal	60763-41-9				NONE

alpha-Amylcinnamaldehyde dimethyl acetal	91-87-2				NONE
alpha-Cyclohexylidene benzeneacetonitrile	10461-98-0				NONE
5-Hexen-1-yl 2-methylbutanoate	155514-23-1				NONE
Carvyl acetate	97-42-7 1205-42-1 1134-95-8				NONE
cis-3-Heptenyl acetate	1576-78-9				NONE
cis-3-Hexenyl isovalerate	35154-45-1				NONE
cis-3-Hexenyl methyl carbonate	67633-96-9				NONE
cis-3-Nonenyl acetate	13049-88-2				NONE
Citronellyl acetate	150-84-5 67601-05-2 141-11-7				NONE
Cyclohexadecanone	2550-52-9				NONE
Cyclohexadecenone	88642-03-9 5365-06-0 2550-59-6 3100-36-5 5120-20-7 854373-71-0 854373-70-9				NONE
1-(2,2,6-Trimethylcyclohexyl)-3-pentanol	60241-52-3 60241-53-4				NONE
(Ethoxymethoxy)-cyclododecane	58567-11-6				NONE
6-Hydroxy-2,6-dimethylheptanal	62439-42-3				NONE
Isobutyl cinnamate	122-67-8				NONE
Isoeugenyl acetate	93-29-8				NONE
4-Methyl-1-propan-2-ylbicyclo[2.2.2]oct-2-ene-8-carboxylate	68966-86-9				NONE
Methyl vanillyl ether	5533-03-9				NONE
Myraldyl acetate	72403-67-9				NONE
Octahydro-dimethylnaphthalene-2-carbaldehyde (mixed isomers)	68738-94-3 68738-96-5 68991-96-8 68991-97-9				NONE
p-Cresol	106-44-5 1319-77-3				NONE
Phenoxyacetaldehyde	2120-70-9				NONE
Carvomenthone	499-70-7 59471-80-6				NONE
4-tert-Butylcyclohexanone	98-53-3				NONE
7-Methoxy-3,7-dimethyloct-1-ene	53767-86-5				NONE

Methoxycyclododecane	2986-54-1				NONE
2,5-Octadien-4-one, 5,6,7-trimethyl-, (2E)-	358331-95-0 357650-26-1 847144-75-6				NONE

IFRA 51st Amendment Restricted Naturals

Name	CAS	%	Name	CAS	%
Angelica root oil	8015-64-3 84775-41-7	NONE	Melissa oil (geniune Melissa officinalis L.)	8014-71-9 84082-61-1	NONE
Bergamot oil expressed	8007-75-8 89957-91-5	NONE	Opoponax	8021-36-1 9000-78-6 93384-32-8	NONE
Birch wood oil, distillates	8001-88-5 68917-50-0 84012-15-7 85251-66-7 85940-29-0 91745-85-6	NONE	Peru balsam extracts and distillates	8007-00-9	NONE
Bitter orange peel oil expressed	68916-04-1 72968-50-4	NONE	Pinacea derivatives	Various	NONE
Cade oil, rectified or distillates	8013-10-3 90046-02-9	NONE	Rue oil	8014-29-7 84929-47-5	NONE
Citrus oils and other furocoumarins containing essential oils	Various	NONE	Savin oil, <i>Juniperus phoenicea</i> L.	68916-94-9 90046-03-0	NONE
Cumin oil	8014-13-9 84775-51-9	NONE	Styrax extracts, distillates (resinoids, absolutes, oils)	8046-19-3 8024-01-9 94891-27-7 94891-28-8 101227-15-0	NONE
Grapefruit oil expressed	8016-20-4 90045-43-5	NONE	Tagetes patula or minuta	91722-29-1 8016-84-0 91770-75-1	NONE
Jasmine absolute (grandiflorum)	8022-96-6 8024-43-9 90045-94-6 84776-64-7	NONE	Tea leaf absolute	84650-60-2	NONE
Jasmin absolute (sambac)	91770-14-8 1034798-23-6	NONE	Verbena absolute (Lippia citriodora Kunth.)	8024-12-2 85116-63-8	NONE
Lemon oil cold pressed	8008-56-8 84929-31-7	NONE	Vetiver oil, acetylated	84082-84-8 68917-34-0 73246-97-6 62563-80-8	NONE
Lime oil expressed	8008-26-2 90063-52-8	NONE	Ylang ylang extracts	8006-81-3 68606-83-7 83863-30-3	NONE

IFRA 51st Amendment Prohibited Materials

Does this product contain any material prohibited or not recommended for use by IFRA up to and including the 51st amendment? Yes ☐ No ☒

If yes (see list below), please specify and indicate percent on line below:

List of materials either prohibited or not recommended for use by IFRA up to and including the 51st amendment

Name	CAS	Name	CAS
Acetyl ethyl tetramethyl tetralin (AETT, Versalide)	88-29-9	Ethyl acrylate	140-88-5
Acetyl isovaleryl (5-Methyl-2,3-hexanedione)	13706-86-0	Ethylene glycol monoethyl ether	110-80-5
Allantroot oil (Elecampane oil)	97676-35-2, 84012-20-4	Ethylene glycol monoethyl ether acetate	111-15-9
Allyl heptine carbonate	73157-43-4	Ethylene glycol monomethyl ether	109-86-4
Allyl isothiocyanate	57-06-7	Ethylene glycol monomethyl ether acetate	110-49-6
Amylcyclopentenone	25564-22-1	Fig leaf absolute	68916-52-9, 90028-74-3
Anisylidene acetone (4-(4-methoxyphenyl)-3-buten-2-one)	943-88-4	Furfuryl alcohol	98-00-0
Asarone, cis-beta ((Z)-1,2,4-trimethoxy-5-prop-1-enylbenzene) (directly added only, not when indirectly present from naturals)	5273-86-9	Furfurylidene acetone	623-15-4
Asarone, isomer unspecified (1,2,4-trimethoxy-5-prop-1-enylbenzene) (directly added only, not when indirectly present from naturals)	494-40-6	Geranyl nitrile	5146-66-7, 5585-39-7, 31983-27-4
Asarone, trans ((E)-1,2,4-trimethoxy-5-prop-1-enylbenzene) (directly added only, not when indirectly present from naturals)	2883-98-9	trans-2-Heptenal	18829-55-5
Benzene (directly added only, not when indirectly present from naturals or as synthetic impurity)	71-43-2	2,4-Hexadien-1-ol	111-28-4, 17102-64-6
Benzyl cyanide (directly added only, not when indirectly present from naturals)	140-29-4	Hexahydrocoumarin	700-82-3
Benzylidene acetone (4-Phenyl-3-buten-2-one)	122-57-6	trans-2-Hexenal diethyl acetal	67746-30-9
Birch wood (bark) pyrollysates (oils), crudes (not rectified or distilled)	8001-88-5, 68917-50-0, 84012-15-7, 85251-66-7, 85940-29-0, 91745-85-6	trans-2-Hexenal dimethyl acetal	18318-83-7
Boldo oil	8022-81-9 84649-96-7	Hydroabietyl alcohol, Dihydroabietyl alcohol	13393-93-6, 26266-77-3, 1333-89-7
Bromstyrene	103-64-0	Hydroquinone monoethyl ether (4-Ethoxy phenol)	622-62-8
3-Bromo-1,7,7-trimethylbicyclo[2.2.1]heptane-2-one	76-29-9	Hydroquinone monomethyl ether (4-Methoxy phenol)	150-76-5
p-tert-Butyl-α-methylhydrocinnamic aldehyde (p-BMHCA) (Cat 1 and 6 only)	80-54-6	Isophorone (directly added only, not when indirectly present from naturals)	78-59-1

<i>p</i> -tert-Butylphenol	98-54-4	6-Isopropyl-2-decalol	34131-99-2
Cade oils, crude (not rectified or distilled)	8013-10-3, 90046-02-9	Massoia bark oil	85085-26-3
Carvone oxide	33204-74-9	Massoia lactone	54814-64-1, 51154-96-2
Chenopodium oil	8006-99-3, 8024-11-1, 89997-47-7	7-Methoxycoumarin (directly added only, not when indirectly present from naturals)	531-59-9
Cinnamylidene acetone	4173-44-8	α -Methyl anisylidene acetone (1- (4-Methoxyphenyl)-1-penten-3-one)	104-27-8
Colophony	8050-09-7	6-Methyl coumarin (Toncarine)	92-48-8
Costus root oil, absolute and concrete	8023-88-9, 90106-55-1	7-Methyl coumarin	2445-83-2
Cyclamen alcohol (3-(4-Isopropylphenyl)-2-methylpropanol) (directly added)	4756-19-8	Methyl crotonate	623-43-8
2,2-Dichloro-1-methylcyclopropylbenzene	3591-42-2	4-Methyl-7-ethoxycoumarin	87-05-8
2,4-Pentadienal	764-40-9	<i>p</i> -Methylhydrocinnamic aldehyde	5406-12-2
2,4-Hexadienal	80466-34-8	Methyl methacrylate	80-62-6
2,4-Heptadienal	5910-85-0	3-Methyl-2 (3)-nonenenitrile	53153-66-5
2,4-Octadienal	5577-44-6	Musk α	63697-53-0
2,4-Octadienal, trans, trans-	30361-28-5	Musk ambrette	83-66-9
2,4-Nonadienal	6750-03-4	Musk KS	62265-99-0
2,4-Decadienal	2363-88-4	Musk Moskene	116-66-5
2,4-Undecadienal	13162-46-4	Musk tibetine	145-39-1
2,4-Dodecadienal, trans, trans	21662-16-8	Musk xylene	81-15-2
trans, trans, 2,4-Decadienal	25152-84-5	Nitrobenzene	98-95-3
trans, trans, 2,4-Undecadienal	30361-29-6	2-Pentylidene cyclohexanone	25677-40-1
trans, trans, 2,4-Heptadienal	4313-03-5	Peru balsam (crude or exudation from Myroxylon pereirae Klotzsch, not extract or distilled)	8007-00-9
trans-2,4-Pentadienal	20432-40-0	Phenyl acetone (Methyl benzyl ketone)	103-79-7
trans, trans, 2,4-Nonadienal	5910-87-2	Phenyl benzoate	93-99-2
trans, trans, 2,4-Hexadienal	142-83-6, 4488-48-6	Pseudoionone (directly added, not as impurity from ionones)	141-10-6
trans, cis, 2,4-Hexadienal	53398-76-8	Pseudomethylionones (directly added, not as impurity in Methylionones)	26651-96-7, 72968-25-3, 1117-41-5
Diethyl maleate	141-05-9	Quinoline	91-22-5
2,4-Dihydroxy-3-methyl-benzaldehyde	6248-20-0	Safole, Isosafole, and Dihydrosafole (directly added only, not when indirectly present from naturals)	94-59-7, 120-58- 1 94-58-6
4,6-Dimethyl-8-tert-butyl coumarin	17874-34-9	Santolina oil	84961-58-0
Dimethyl citraconate	617-54-9	Savin Oil (<i>Juniperus sabina</i> L.)	8024-00-8, 90046-04-1
3,7-Dimethyl-2-octen-1-ol (6,7-Dihydrogeraniol)	40607-48-5	Styrax gums, crude (not resin, oil, rectified or distilled)	8024-01-9, 8046-19-3, 94891-27-7, 94891-28-8, 101227-15-0
Diphenylamine	122-39-4	Tagetes erecta	90131-43-4, 8016-84-0
2,4-Dodecadien-1-ol, (2E,4E)-	18485-38-6	Toluene (directly added only, not when indirectly present from naturals or as synthetic impurity)	108-88-3
Esters of 2-nonynoic acid, except methyl octine carbonate	Various (e.g.: 10031-92- 2)	Verbena oil	8024-12-2, 85116-63-8
Esters of 2-octynoic acid, except methyl heptene carbonate	Various (e.g.: 10484-32- 9, 10519-20-7)	Mintlactone	13341-72-5
		3-Acetyl-2,5-dimethylfuran	10599-70-9

