



SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : LAFITA ALÉSIA
Product code : DOV-018

1.2. Relevant identified uses of the substance or mixture and uses advised against

Application : SU21 Consumer product. PC3 Air care products. Airfreshener.

1.3. Details of the supplier of the safety data sheet

Supplier : Dovox B.V.
Computerweg 3
3542 DP UTRECHT, The Netherlands
Telephone : +31-30-7116 824
Fax : +31-30-3100 141
E-mail : info@dovox.nl
Website : www.dovox.nl

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:
NL - Telephone : +31-30-7116 824 (During office hours only)

EMERGENCY TELEPHONE NUMBER (for DOCTORS only):
National Poisons Information Service +44 344 892 0111 (24/7)

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP classification : Skin irritation, category 2. Skin sensitization, category 1. Hazardous to the aquatic environment — (1272/2008/EC) Chronic category 1.
Human health hazards : Causes skin irritation. May cause an allergic skin reaction.
Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives.
Environmental hazards : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label elements (1272/2008/EC):

Hazard pictograms :



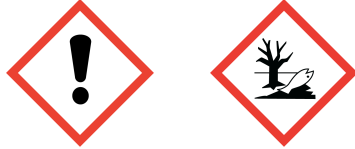
Signal word : Warning

H- and P-phrases : H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 gloves Wear protective gloves.
P302+P352 IF ON SKIN: Wash with plenty of water/soap.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P273 Avoid release to the environment.
 P391 Collect spillage.
 P501 Dispose of contents/container to an official chemical waste depot.

Labelling of packagings where the contents do not exceed 125 ml and it is technically impossible to list all phrases:

Hazard pictograms :



Signal word : Warning

H- and P-phrases :

- H317 May cause an allergic skin reaction.
- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P280 gloves Wear protective gloves.
- P302+P352 IF ON SKIN: Wash with plenty of water/soap.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P501 Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

: Contains: 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one ; 4-tert-Butylcyclohexyl acetate ; Linalyl acetate ; 3,4,5,6,6-Pentamethylhept-3-en-2-one (mixed isomers) ; Cedryl methyl ketone ; (-)-Pin-2(10)-ene ; Pin-2(3)-ene ; 2,2,6-Trimethyl- α -propylcyclohexanepropanol ; [3R-(3 α ,3 $\alpha\beta$,6 α ,7 β ,8 $\alpha\alpha$)]-Octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene ; Methyl 2,4-dihydroxy-3,6-dimethylbenzoate ; d-Limonene ; Eugenol ; Linalool ; Pin-2(10)-ene ; Cinnamaldehyde .

2.3. Other hazards

Other information : Does not contain PBT or vPvB substances.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS *

3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	50 - 100	54464-57-2	259-174-3		01-2119489989-04
4-tert-Butylcyclohexyl acetate	5 - < 10	32210-23-4	250-954-9		01-2119976286-24
Linalyl acetate	5 - < 10	115-95-7	204-116-4		01-2119454789-19
3,4,5,6,6-Pentamethylhept-3-en-2-one (mixed isomers)	5 - < 10	-----	939-627-8		01-2119980043-42
Cedryl methyl ketone	1 - < 5	32388-55-9	251-020-3		01-2119969651-28
Oxydipropanol	1 - < 5	25265-71-8	246-770-3	MAC	
(-)-Pin-2(10)-ene	0,1 - < 1	18172-67-3	242-060-2		01-2119519230-54
Pin-2(3)-ene	0,1 - < 1	80-56-8	201-291-9		01-2119519223-49
2,2,6-Trimethyl- α -propylcyclohexanepropanol	0,1 - < 1	-----	942-425-2		01-2120085416-52
[3R-(3 α ,3 $\alpha\beta$,6 α ,7 β ,8 $\alpha\alpha$)]-Octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene	0,1 - < 1	67874-81-1	267-510-5		01-2120228335-61



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Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	0,1 - < 1	4707-47-5	225-193-0		01-2120762759-36
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	0,1 - < 1	469-61-4	207-418-4		
d-Limonene	0,1 - < 1	5989-27-5	227-813-5		01-2119529223-47
Eugenol	0,1 - < 1	97-53-0	202-589-1		01-2119971802-33
Linalool	0,1 - < 1	78-70-6	201-134-4		01-2119474016-42
Pin-2(10)-ene	0,1 - < 0,25	127-91-3	204-872-5		
Cinnamaldehyde	0,01 - < 0,1	104-55-2	203-213-9		01-2119935242-45

Substance name	Hazard Class	H-phrases	Pictograms	
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Skin Irrit. 2; Skin Sens. 1B; Aquatic Chronic 1	H315; H317; H410	GHS07; GHS09	M (chronic) = 1
4-tert-Butylcyclohexyl acetate	Skin Sens. 1B	H317	GHS07	
Linalyl acetate	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07	
3,4,5,6,6-Pentamethylhept-3-en-2-one (mixed isomers)	Skin Sens. 1B; Aquatic Chronic 2	H317; H411	GHS07; GHS09	
Cedryl methyl ketone	Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 1	H317; H400; H410	GHS07; GHS09	M (acute) = 1 M (chronic) = 1
Oxydipropanol	----	----	----	
(-)-Pin-2(10)-ene	Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 1	H226; H304; H315; H317; H400; H410	GHS02; GHS07; GHS08; GHS09	M (acute) = 1 M (chronic) = 1
Pin-2(3)-ene	Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2; Skin Sens. 1B; Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1	H226; H302; H315; H317; H304; H400; H410	GHS02; GHS07; GHS08; GHS09	M (acute) = 1 M (chronic) = 1
2,2,6-Trimethyl-α-propylcyclohexanepropanol	Skin Sens. 1B	H317	GHS07	
[3R-(3α,3aβ,6α,7β,8aα)]-Octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene	Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 1	H317; H400; H410	GHS07; GHS09	M (acute) = 1 M (chronic) = 1
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Skin Sens. 1B	H317	GHS07	
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1	H304; H400; H410	GHS08; GHS09	M (acute) = 10 M (chronic) = 10
d-Limonene	Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 1	H226; H304; H315; H317; H400; H410	GHS02; GHS07; GHS08; GHS09	M (acute) = 1
Eugenol	Eye Irrit. 2; Skin Sens. 1B	H319; H317	GHS07	
Linalool	Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1B	H315; H317; H319	GHS07	



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Pin-2(10)-ene	Flam. Liq. 3; Skin Sens. 1B; Asp. Tox. 1; Skin Irrit. 2; Aquatic Acute 1; Aquatic Chronic 1	H226; H317; H304; H315; H400; H410	GHS02; GHS07; GHS08; GHS09	M (acute) = 1 M (chronic) = 1
Cinnamaldehyde	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1A	H312; H315; H317; H319	GHS07	

Occupational exposure limit(s), if relevant, are listed in section 8.

Reference is made to chapter 16 for full text of each relevant H phrase.

SECTION 4 FIRST-AID MEASURES

4.1. Description of first aid measures

First aid measures

- Inhalation : Not applicable under normal conditions of use. Consult a doctor if victim feels unwell.
- Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up. Consult a doctor if irritation occurs.
- Eye contact : Wash out with (lukewarm) water. Remove contact lenses. Consult a doctor if irritation persists.
- Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

4.2. Most important symptoms and effects, both acute and delayed

Effects and symptoms

- Inhalation : No specific effects and/or symptoms are known.
- Skin contact : Irritant. May cause redness and irritation, sensitisation. May produce an allergic reaction. May cause dry skin.
- Eye contact : May cause stinging of eyes and redness.
- Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians : None known.

SECTION 5 FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

- Suitable : Carbondioxide (CO₂). Foam. Dry chemical. Water fog.
- Not suitable : Water jet.

5.2. Special hazards arising from the substance or mixture

- Special exposure hazards : None known.
- Hazardous thermal decomposition products : Carbon monoxide may be evolved if incomplete combustion occurs.

5.3. Advice for firefighters

- Special protective equipment for fire-fighters : Use adequate respiratory equipment in case of insufficient ventilation.

SECTION 6 ACCIDENTAL RELEASE MEASURES



6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material. Vapours are heavier than air. Build up (of gasses) in low areas involves risk of suffocation.

6.2. Environmental precautions

Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. In case of large spills: contain with dike. Waste product should not be allowed to contaminate soil or water.

Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

6.4. Reference to other sections

Reference to other sections : See also section 8.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Avoid contact with skin and eyes. Avoid splashing. Wear protective clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep frost-free, in a cool, dry and well-ventilated place (< 35 °C). Keep away from oxidizing agents.

Recommended packaging : Keep only in the original container.

Non recommended packaging : None known.

7.3. Specific end use(s)

Use : Use only as directed.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Workplace exposure limits (mg/m³):

Chemical name	Country	TWA 8 hour (mg/m ³)	STEL 15 min (mg/m ³)	Comments	Source
Oxydiopropanol		67	-		MAC: DE
Pin-2(3)-ene		113	-		MAC: BE
d-Limonene		28	80		MAC: DE, CH

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect



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1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Dermal	0,1011 mg/kg bw			1,73 mg/kg bw/day
Linalyl acetate	Inhalation				1,76 mg/m3
	Dermal	0,2362 mg/kg bw		0,2362 mg/kg bw/day	2,5 mg/kg bw/day
3,4,5,6,6-Pentamethylhept-3-en-2-one (mixed isomers)	Inhalation				2,75 mg/m3
	Dermal				1,7 mg/kg bw/day
Cedryl methyl ketone	Inhalation				6 mg/m3
	Dermal				0,33 mg/kg bw/day
Oxydipropanol	Inhalation				1,175 mg/m3
	Dermal				84 mg/kg bw/day
(-)-Pin-2(10)-ene	Inhalation				238 mg/m3
	Dermal				0,8 mg/kg bw/day
Pin-2(3)-ene	Inhalation				5,69 mg/m3
	Dermal				0,54 mg/kg bw/day
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Inhalation				3,8 mg/m3
	Dermal			2,5 mg/kg bw/day	
d-Limonene	Inhalation				33,3 mg/m3
	Dermal				6 mg/kg bw/day
Eugenol	Inhalation				21,2 mg/m3
	Dermal				2,5 mg/kg bw/day
Linalool	Inhalation		5 mg/kg bw		2,8 mg/m3
	Dermal		16,5 mg/m3		0,8 mg/kg bw/day
Pin-2(10)-ene	Inhalation				5,69 mg/m3
	Dermal			0,054 mg/kg bw/day	2,5125 mg/kg bw/day
Cinnamaldehyde	Inhalation				2,203 mg/m3
	Dermal				

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Dermal	0,0506 mg/kg bw			0,86 mg/kg bw/day
	Inhalation				0,43 mg/m3
Linalyl acetate	Oral				0,25 mg/kg bw/day
	Dermal	0,2362 mg/kg bw		0,2362 mg/kg bw/day	1,25 mg/kg bw/day
3,4,5,6,6-Pentamethylhept-3-en-2-one (mixed isomers)	Inhalation				0,68 mg/m3
	Oral				0,2 mg/kg bw/day
Cedryl methyl ketone	Dermal				1 mg/kg bw/day
	Inhalation				1,8 mg/m3
Oxydipropanol	Oral				1 mg/kg bw/day
	Dermal				0,166 mg/kg bw/day
(-)-Pin-2(10)-ene	Inhalation				0,289 mg/m3
	Oral				0,166 mg/kg bw/day
Pin-2(3)-ene	Dermal				51 mg/kg bw/day
	Inhalation				70 mg/m3
	Oral				24 mg/kg bw/day
	Dermal				0,3 mg/kg bw/day
	Inhalation				1 mg/m3
	Oral				0,3 mg/kg bw/day
	Dermal				0,19 mg/kg bw/day



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Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Inhalation				0,67 mg/m ³
	Oral				0,19 mg/kg bw/day
d-Limonene	Dermal			1,25 mg/kg bw/day	
	Inhalation				8,33 mg/m ³
Eugenol	Oral				4,76 mg/kg bw/day
	Dermal				3 mg/kg bw/day
Linalool	Inhalation				5,22 mg/m ³
	Oral				3 mg/kg bw/day
Linalool	Dermal	2,5 mg/kg bw		15 mg/kg bw/day	1,25 mg/kg bw/day
	Inhalation	4,1 mg/m ³			0,7 mg/m ³
Pin-2(10)-ene	Oral	1,2 mg/kg bw			0,2 mg/kg bw/day
	Dermal			0,027 mg/kg bw/day	0,3 mg/kg bw/day
Cinnamaldehyde	Inhalation				1 mg/m ³
	Oral				0,3 mg/kg bw/day
	Dermal				0,625 mg/kg bw/day
	Inhalation				0,5435 mg/m ³
	Oral				2,5 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
4-tert-Butylcyclohexyl acetate	Water	0,0053 mg/l	0,00053 mg/l	
	Sediment	2,01 mg/kg	0,21 mg/kg	
	Intermittent water			0,053 mg/l
	STP			12,2 mg/l
	Soil			0,42 mg/kg
Linalyl acetate	Oral			66,76 mg/kg food
	Water	0,011 mg/l	0,001 mg/l	
	Sediment	0,609 mg/kg	0,061 mg/kg	
	Intermittent water			0,11 mg/l
	STP			10 mg/l
3,4,5,6,6-Pentamethylhept-3-en-2-one (mixed isomers)	Soil			0,115 mg/kg
	Water	0,0048 mg/l	0,00048 mg/l	
	Sediment	0,621 mg/kg	0,062 mg/kg	
	STP			22 mg/l
	Soil			0,121 mg/kg
Oxydipropanol	Water	0,1 mg/l	0,01 mg/l	
	Sediment	0,238 mg/kg	0,0238 mg/kg	
	Intermittent water			1 mg/l
	STP			1000 mg/l
	Soil			0,0253 mg/kg
(-)-Pin-2(10)-ene	Oral			313 mg/kg food
	Water	0,001 mg/l	0,0001 mg/l	
	Sediment	0,337 mg/kg	0,034 mg/kg	
	STP			3,26 mg/l
	Soil			0,067 mg/kg
Pin-2(3)-ene	Oral			13,1 mg/kg food
	Water	0,0006 mg/l	0,00006 mg/l	
	Sediment	0,157 mg/kg	0,0157 mg/kg	
	STP			0,2 mg/l
	Soil			0,0317 mg/kg
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Oral			8,76 mg/kg food
	Water	0,0033 mg/l	0,00033 mg/l	

d-Limonene	Sediment	0,089 mg/kg	0,0089 mg/kg	
	STP			10 mg/l
	Soil			0,016 mg/kg
	Water	0,0054 mg/l	0,0005 mg/l	
Linalool	Sediment	1,32 mg/kg	0,13 mg/kg	
	STP			1,8 mg/l
	Soil			0,262 mg/kg
	Oral			3,33 mg/kg food
Pin-2(10)-ene	Water	0,2 mg/l	0,02 mg/l	
	Sediment	2,22 mg/kg	0,222 mg/kg	
	Intermittent water			2 mg/l
	STP			10 mg/l
Cinnamaldehyde	Soil			0,327 mg/kg
	Oral			7,8 mg/kg food
	Water	0,001004 mg/l	0,0001 mg/l	
	Sediment	0,337 mg/kg	0,034 mg/kg	
	STP			3,26 mg/l
	Soil			0,067 mg/kg
	Oral			13,1 mg/kg food
	Water	1,004 mg/l	0,1004 mg/l	
	Sediment	159,1851 mg/kg	159,1851 mg/kg	
	Intermittent water			1,004 mg/l
	STP			13,119 mg/l
	Soil			56,0847 mg/kg
	Oral			0,00033 mg/kg food

8.2. Exposure controls

Engineering measures : Comply with standard precautionary measures for working with chemicals.
 Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.



- Body protection : Wear appropriate protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345. Suitable material: nitril. Indication of permeation breakthrough time: > 0,5 hour.
- Respiratory protection : Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type A (brown), class I or higher on e.g. a facemask in accordance with EN 140.
- Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: nitril. 0,13 mm. Indication of permeation breakthrough time: > 0,5 hour.
- Eye protection : Wear appropriate safety glasses when there is danger of possible eye contact.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance : Liquid. Impregnated material.
 Colour : Light yellow.
 Odour : Perfumed.
 Odour threshold : Not known.



pH	: Not applicable.	Waterfree product.
Solubility in water	: Not soluble.	
Partition coefficient (n-octanol/water)	: Not known.	Not measured. Not relevant for mixtures.
Flash point	: > 100 °C	
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 225 °C	
Boiling point/boiling range	: > 100 °C	
Melting point/melting range	: < 0 °C	
Explosive properties	: None known.	Does not contain explosives.
Explosion limits (% in air)	: Not known.	Lower explosion limit in air (%): 0,7 (Linalyl acetate)
	:	Upper explosion limit in air (%): 4,3 (Linalyl acetate)
Oxidising properties	: Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	: Not applicable.	
Viscosity (20°C)	: Not known.	
Viscosity (40°C)	: Not relevant.	The product contains < 10% substances having an aspiration hazard.
Vapour pressure (20°C)	: Not known.	
Vapour density (20°C)	: > 1	(air = 1)
Relative density (20°C)	: 1 g/ml	
Evaporation rate	: Not known.	(n-butyl acetate = 1)

9.2. Other information

Other information : Not relevant.

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity : See sub-sections below.

10.2. Chemical stability

Stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid : See section 7.

10.5. Incompatible materials

Materials to avoid : Keep away from oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No toxicological research has been carried out on this product.

Inhalation



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- Acute toxicity : Calculated LC50: > 10 mg/l. Ingredients of unknown toxicity: 94 %. ATE: > 5 mg/l. Not classified due to lack of data.
- Corrosion/irritation : Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.
- Skin contact**
- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Irritant. May cause redness.
- Sensitisation : May cause sensitisation by skin contact. May produce an allergic reaction.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.
- Eye contact**
- Corrosion/irritation : Slight irritation possible. Not classified - based on available data, the classification criteria are not met.
- Ingestion**
- Acute toxicity : Calculated LD50: > 4470 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Aspiration : Not expected to be an aspiration hazard. Contains a substance/substances with an aspiration hazard. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea.
- Carcinogenicity : Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.
- Reprotoxicity : Development: Not expected to be reprotoxic. Development: Not classified - Based on available data, the classification criteria are not met. Fertility: not expected to be reprotoxic. Fertility: Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Skin irritation	Non-irritant	-----	Rabbit
	Skin sensitisation	6825 ug/cm2	OECD 429	Mouse
	LD50 (oral)	> 5000 mg/kg bw	-----	Rat
	LD50 (dermal)	> 5000 mg/kg bw	-----	Rat
	Mutagenicity	Not mutagenic	OECD 471	-----
4-tert-Butylcyclohexyl acetate	NOAEL (development, oral)	480 mg/kg bw/d	OECD 414	Rat
	LD50 (oral)	5000 mg/kg bw	-----	Rat
	LD50 (dermal)	> 5000 mg/kg bw		Rabbit
	Eye irritation	Non-irritant		Rabbit
	Skin irritation	Non-irritant		Rabbit
Linalyl acetate	NOAEL (oral) - estimate	710 mg/kg bw/d	Read across	
	LC50 (inhalation) - estimate	> 5000 mg/m3	-----	Rat
	NOAEL (development, oral)	> 1000 mg/kg bw/d	OECD 414	Rat
	Genotoxicity - in vivo	Not genotoxic	OECD 474	Mouse
	Genotoxicity - in vitro	Not genotoxic	OECD 476	Mouse



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3,4,5,6,6-Pentamethylhept-3-en-2-one (mixed isomers)	Mutagenicity	Not mutagenic	OECD 471	Salmonella typhimurium
	NOAEL (dermal)	250 mg/kg bw/d	OECD 411	Rat
	NOAEL (oral)	160 mg/kg bw/d	OECD 407	Rat
	Eye irritation	Irritant	OECD 405	Rabbit
	Skin irritation	Irritant	OECD 404	Rabbit
	Skin irritation	Non-irritant	-----	Human
	LC50 (inhalation)	> 2740 mg/m3	-----	Mouse
	Skin sensitisation	Sensitizing.	OECD 429	Mouse
	LD50 (oral)	13934 mg/kg bw	-----	Rat
	Cedryl methyl ketone	NOAEL (fertility, oral)	1000 mg/kg bw/d	OECD 414
NOAEL (development, oral)		2500 mg/kg bw/d	OECD 422	Rat
Eye irritation		Non-irritant		
Skin irritation		Non-irritant		
Mutagenicity		Negative	OECD 471	Salmonella typhimurium
Genotoxicity - in vitro		Not genotoxic	OECD 476	Mouse
NOAEL (oral)		41 mg/kg bw/d	OECD 422	Rat
NOEL (carcinogenicity) - estimate		Not carcinogenic	Read across	
LD50 (dermal) - estimate		> 5000 mg/kg bw	Read across	Rabbit
LD50 (oral)		> 5000 mg/kg bw	OECD 401	Rat
(-)-Pin-2(10)-ene	NOAEL (fertility, oral)	50 mg/kg bw/d	-----	Rat
	NOAEL (development, oral)	100 mg/kg bw/d	-----	Rat
	LD50 (dermal)	> 2000 mg/kg bw	-----	Rabbit
	LD50 (oral)	5000 mg/kg bw	-----	Rat
	LD50 (oral) - estimate	> 2000 mg/kg bw	Read across	Rat
	LD50 (dermal) - estimate	> 5000 mg/kg bw	Read across	Rabbit
Pin-2(3)-ene	Mutagenicity - estimate	Not mutagenic	Read across	Salmonella typhimurium
	Skin sensitisation	Sensitizing.	-----	Guinea pig
	Skin irritation	Non-irritant	-----	Human
	Skin irritation	Moderately irritant	-----	Rabbit
	Mutagenicity	Not mutagenic	-----	Salmonella typhimurium
	Eye irritation - estimate	Moderately irritant	Read across	Rabbit
	Genotoxicity - estimate	Not genotoxic	Read across	
	NOAEL (development) - estimate	250 mg/kg.d	Read across	Rat
	NOAEL (inhalation)	170 mg/m3	OECD 413	Rat
	NOAEL (oral) - estimate	250 mg/kg bw/d	Read across	
2,2,6-Trimethyl- α -propylcyclohexanepropanol	LD50 (oral)	> 300 mg/kg bw	-----	Rat
	LD50 (dermal)	> 2000 mg/kg bw	OECD 402	Rat
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Eye irritation	Moderately irritant		Rabbit
	Skin irritation - estimate	Non-irritant	Read across	
	LD50 (dermal)	> 2000 mg/kg bw	OECD 402	Rabbit
[3R-(3 α ,3 α β ,6 α ,7 β ,8 α)]-Octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene	LD50 (oral)	> 5000 mg/kg bw	OECD 401	Rat
	LC50 (inhalation) - estimate	> 13000 mg/m3	Read across	
	LD50 (dermal)	> 5000 mg/kg bw	OECD 402	Rabbit



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Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	LD50 (oral)	> 5000 mg/kg bw	OECD 401	Rat
	Eye irritation	Non-irritant	OECD 405	Rabbit
d-Limonene	Skin irritation	Non-irritant		
	LD50 (oral)	> 5000 mg/kg bw	OECD 401	Rat
	LD50 (dermal)	> 5000 mg/kg bw	OECD 402	Rat
	NOAEL (oral)	150 mg/kg bw/d		Rat
	Genotoxicity - in vitro	Not genotoxic		
	LD50 (oral)	4400 mg/kg bw	----	Rat
	LD50 (dermal)	> 2000 mg/kg bw	----	Rabbit
	Skin irritation	Irritant	----	----
	NOAEL (development, oral)	600 mg/kg bw/d		Rat
	Skin sensitisation	10075 ug/cm2	OECD 429	Mouse
	Mutagenicity	Negative	OECD 471	
Eugenol	Eye irritation	Non-irritant	OECD 405	Rabbit
	NOEL (carcinogenicity, oral)	> 300 mg/kg bw/d	OECD 451	Rat
	Genotoxicity - in vivo	> 2000 mg/kg bw/d		Rat
	LD50 (oral)	> 2000 mg/kg bw	OECD 423	Rat
	LC50 (inhalation)	> 2580 mg/m3	OECD 403	Rat
	LC50 (inhalation) - estimate	> 5000 mg/m3		Rat
	LD50 (dermal)	> 2000 mg/kg bw		Rat
	NOEL (carcinogenicity, oral)	300 mg/kg bw/d	----	Rat
	Skin sensitisation	2703 ug/cm2	OECD 429	Mouse
	NOAEL (oral)	600 mg/kg bw/d	OECD 408	Rat
	Genotoxicity - in vitro	Genotoxic	OECD 476	Mouse
	Genotoxicity - estimate	Not genotoxic		
	Genotoxicity - in vivo	Genotoxic	OECD 474	Mouse
	Mutagenicity	Not mutagenic	OECD 471	Salmonella typhimurium
Linalool	NOAEL (fertility) - estimate	> 700 mg/kg.d	Read across	Rat
	NOAEL (development, oral)	250 mg/kg bw/d		Rabbit
	NOAEL (development, oral)	365 mg/kg bw/d	----	Rat
	Eye irritation	Non-irritant	OECD 405	Rabbit
	Skin sensitisation	12650 ug/cm2	OECD 429	Mouse
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	NOAEL (fertility, oral)	500 mg/kg bw/d		Rat
	Skin irritation	Irritant	OECD 404	Rabbit
	NOAEL (dermal)	250 mg/kg bw/d	OECD 411	Rat
	Genotoxicity - in vivo	Not genotoxic	OECD 475	Mouse
	LD50 (dermal)	5610 mg/kg bw	----	Rabbit
	Skin irritation	Mildly irritant	----	Human
	LD50 (oral)	2790 mg/kg bw	----	Rat
Pin-2(10)-ene	NOAEL (oral)	117 mg/kg bw/d	----	Rat
	Eye irritation	Moderately irritant	OECD 405	Rabbit
	NOAEL (development) - estimate	250 mg/kg.d	Read across	
	Skin sensitisation	Sensitizing.	OECD 429	Mouse
	LD50 (dermal)	> 5000 mg/kg bw		Rabbit
	LD50 (oral)	> 5000 mg/kg bw		Rat
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium



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Cinnamaldehyde	Skin irritation	Irritant	-----	-----
	Skin irritation	Severely irritant	-----	-----
	NOAEL (development, oral)	5 mg/kg bw/d	-----	Rat
	LD50 (oral)	2220 mg/kg bw	-----	Rat
	LD50 (dermal)	1260 mg/kg bw	-----	Rabbit
	Mutagenicity	Not mutagenic	-----	Salmonella typhimurium
	NOAEL (oral) - estimate	250 mg/kg bw/d	-----	
	Genotoxicity - in vitro	Genotoxic	-----	
	Genotoxicity - in vivo	Not genotoxic	-----	
	Eye irritation	Moderately irritant	-----	Rabbit
NOEL (carcinogenicity) - estimate	Not carcinogenic	-----		
Skin sensitisation	262 ug/cm2	OECD 429	Mouse	

SECTION 12 ECOLOGICAL INFORMATION *

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Very toxic to aquatic organisms. Calculated LC50 (fish): 1 mg/l. Calculated EC50 (waterflea): < 1 mg/l. Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence – degradability : May cause long-term adverse effects in the aquatic environment.

12.3. Bioaccumulative potential

Bioaccumulative potential : Contains bioaccumulating substances.

12.4. Mobility in soil

Mobility : Adsorbs to soil and has low mobility.

12.5. Results of PBT and vPvB ass

PBT/vPvB assessment : Does not contain PBT or vPvB substances.

12.6. Other adverse effects

Other information : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	LC50 (fish)	1,3 mg/l	OECD 203	-----
	EC50 (waterflea)	1,38 mg/l	OECD 202	-----
	IC50 (alga)	> 2,6 mg/l	OECD 201	-----
	Log P(ow)	5,23		
Cedryl methyl ketone	BCF	600		
	LC50 (fish)	2,3 mg/l	OECD 203	Pimephales promelas
	EC50 (waterflea)	0,86 mg/l	OECD 202	Daphnia magna
	IC50 (alga)	2,80 mg/l	OECD 201	Algae
	NOEC (waterflea) - chronic	0,087 mg/l.d	OECD 211	Daphnia magna
(-)-Pin-2(10)-ene	Log P(ow)	5,6		
	LC50 (fish) - estimate	> 0,1 mg/l		



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Pin-2(3)-ene	EC50 (waterflea) - estimate	> 0,1 mg/l		
	Log P(ow)	4,35		
	LC50 (fish)	0,28 mg/l	-----	Pimephales promelas
	EC50 (waterflea)	1,44 mg/l	-----	Daphnia magna
[3R-(3 α ,3a β ,6 α ,7 β ,8a α)]-Octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene	Ultimate aerobic biodegradation (%)	62 %	OECD 301 B	
	Log P(ow)	4,32		
	LC50 (fish)	0,43 mg/l	OECD 203	Cyprinus carpio
	EC50 (waterflea)	0,48 mg/l	OECD 202	Daphnia magna
[3R-(3 α ,3a β ,7 β ,8a α)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	LC50 (fish) - estimate	0,055 mg/l	-----	-----
	IC50 (algea)	> 1,8 mg/l	OECD 201	Pseudokirchnerella subcapitata
	EC50 (waterflea) - estimate	> 0,01 mg/l		
	Log P(ow)	6,38		
d-Limonene	LC50 (fish)	0,720 mg/l	OECD 203	Pimephales promelas
	EC50 (waterflea)	0,36 mg/l	OECD 202	Daphnia magna
	Ultimate aerobic biodegradation (%)	> 92 %		
	NOEC (waterflea) - chronic	0,15 mg/l.d		Daphnia magna
Pin-2(10)-ene	Log P(ow)	4,38		
	LC50 (fish)	0,502 mg/l	OECD 203	Pimephales promelas
	EC50 (waterflea)	1,25 mg/l	OECD 202	Daphnia magna
	IC50 (algea)	0,826 mg/l	OECD 201	Pseudokirchnerella subcapitata
	Ultimate aerobic biodegradation (%)	76 %	OECD 301 D	
	Log P(ow)	4,4		

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues, impregnated wipes and non-empty pack as hazardous waste.
- Additional warning : None.
- Waste water discharge : Do not dispose into the environment, in drains or in water courses.
- European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.
- Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

SECTION 14 TRANSPORT INFORMATION

14.1. UN number

UN nr. : UN 3082

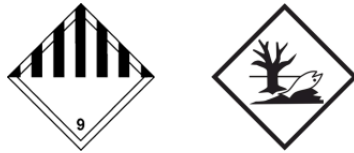
14.2. UN proper shipping name

Transport name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one ; Cedryl methyl ketone)
Transport name (IMDG, IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one ; Cedryl methyl ketone)

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

Class : 9
Classification code : M6
Packaging group : III
Danger label : 9 + the "environmentally hazardous substance" mark.
Tunnel restriction code : C/D



Other information : Not intended for carriage by tank-vessels on inland waterways. This product is not regulated as a dangerous good when transported in sizes of ≤ 5 L or ≤ 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 (Special provisions 375).

IMDG (sea)

Class : 9
Packaging group : III
EmS (fire / spill) : F - A / S - F
Marine pollutant : Yes
Other information : This product is not regulated as a dangerous good when transported in sizes of ≤ 5 L or ≤ 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 (IMDG code 37-14, 2.10.2.7).

IATA (air)

Class : 9

14.6. Special precautions for user

Other information : Country specific variations may apply. It is possible that a "Limited Quantity" exemption applies to the transport of this product.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

SECTION 15 REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Community regulations : Regulation (EU) No 2015/830 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

15.2. Chemical safety assessment



Chemical safety assessment : Not applicable.

SECTION 16 OTHER INFORMATION

*

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EU) No 2015/830 dated 28 May 2015 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ADR	: European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	: Acute Toxicity Estimate
CLP	: Classification, Labeling & Packaging
CMR	: Carcinogenic, Mutagenic or toxic for Reproduction
EEC	: European Economic Community
GHS	: Globally Harmonized System of Classification and Labelling of Chemicals
IATA	: International Air Transport Association
IBC code	: International Bulk Chemical Code
IMDG	: International Maritime Dangerous Goods Code
LD50/LC50	: Lethal Dose/Concentration for 50% of a population
MAC	: Maximum Allowable Concentration
MARPOL	: International Convention for the Prevention of Pollution From Ships
NO(A)EL	: No Observed (Adverse) Effect Level
OECD	: Organisation for Economic Co-operation and Development
PBT	: Persistent, Bioaccumulative and Toxic
PC	: Chemical product category
PT	: Product type
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	: Sewage Treatment Plant
SU	: Sector of Use
TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN	: United Nations
VOC	: Volatile Organic Compounds
vPvB	: Very Persistent and Very Bioaccumulative

Key data used to compile the Safety Data Sheet are from, but not limited to, one or more sources of information e.g. toxicological data from material suppliers, CONCAWE, IFRA, CESIO, Regulation EG 1272/2008, etc.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

Skin Irrit. 2	: Calculation method.
Skin Sens. 1/1A/1B	: Calculation method.
Aquatic Chronic 1	: Calculation method.

Full text of hazard classes mentioned in section 3:

Flam. Liq. 3	: Flammable liquid, category 3.
Acute Tox. 4	: Acute toxicity, category 4.
Skin Irrit. 2	: Skin irritation, category 2.
Eye Irrit. 2	: Eye irritation, category 2.
Skin Sens. 1/1A/1B	: Skin sensitization, category 1/1A/1B.
Asp. Tox. 1	: Aspiration hazard, category 1.



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Aquatic Chronic 1 : Hazardous to the aquatic environment — Chronic category 1.
Aquatic Chronic 2 : Hazardous to the aquatic environment — Chronic category 2.
Aquatic Acute 1 : Hazardous to the aquatic environment — Acute category 1.

Full text of H-phrases mentioned in section 3:

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

Advice on any training appropriate for workers: none.

Number format : "," used as decimal separator.

End of safety data sheet.