


FRA-182 - SHANGHAI

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

- 1.1 Product identifier:** FRA-182 - SHANGHAI
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Product fragrance mixture
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**
Fleurs d'Arômes
3A, Avenue Berton
7333 Tertre - Hainaut - Belgique
Phone.: 0032479433347
fleursdaromes@hotmail.com
https://www.fleursdaromes.be/
- 1.4 Emergency telephone number:** Centre antipoisons: 070/245.245

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
CLP Regulation (EC) No 1272/2008:
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.
Acute Tox. 3: Acute inhalation toxicity, Category 3, H331
Aquatic Acute 1: Hazardous to the aquatic environment, acute hazard, Category 1, H400
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard, Category 2, H411
Asp. Tox. 1: Aspiration hazard, Category 1, H304
Eye Irrit. 2: Eye irritation, Category 2, H319
Repr. 2: Reproductive toxicity, Category 2, H361
Skin Irrit. 2: Skin irritation, Category 2, H315
Skin Sens. 1B: Sensitisation, skin, Category 1B, H317
- 2.2 Label elements:**
CLP Regulation (EC) No 1272/2008:
Danger
- 
- Hazard statements:**
Acute Tox. 3: H331 - Toxic if inhaled
Aquatic Acute 1: H400 - Very toxic to aquatic life
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways
Eye Irrit. 2: H319 - Causes serious eye irritation
Repr. 2: H361 - Suspected of damaging fertility or the unborn child
Skin Irrit. 2: H315 - Causes skin irritation
Skin Sens. 1B: H317 - May cause an allergic skin reaction
- Precautionary statements:**
P101: If medical advice is needed, have product container or label at hand
P102: Keep out of reach of children
P264: Wash thoroughly after handling
P280: Wear protective gloves/protective clothing/eye protection/face protection
P302+P352: IF ON SKIN: Wash with plenty of water
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P501: Dispose of contents/container according to the separated collection system used in your municipality
- Supplementary information:**
Contains (E)-3,7-dimethylocta-2,6-dienal, (z)-citral, 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, 2-(4-tert-butylbenzyl)propionaldehyde, Lysmeral extra, 4-tert-butylcyclohexyl acetate, Cineole, Citral, Coumarin, d-limonene, Eugenol, Geraniol, Geranyl acetate, Hexyl cinnam-aldehyde, 1-b-Bisabolene, Linalyl acetate, Methyl non-2-ynoate, Para-anisyl propanal, Pin-2(10)-ene, Pin-2(3)-ene
- Acute Toxicity Estimate (ATE mix):**

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 2: HAZARDS IDENTIFICATION (continued)

8,02 % (oral), 20,27 % (dermal), 83,77 % (inhalation) of the mixture consists of ingredient(s) of unknown toxicity

UFI: 7JG0-R0GW-8000-JQAC

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

Components:














In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 5989-27-5 EC: 227-813-5 Index: 601-029-00-7 REACH: 01-2119529223-47-XXXX	d-limonene⁽¹⁾ Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 3: H412; Asp. Tox. 1: H304; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Danger	Self-classified 50 - <75 %
CAS: 115-95-7 EC: 204-116-4 Index: Non-applicable REACH: 01-2119454789-19-XXXX	Linalyl acetate⁽¹⁾ Regulation 1272/2008 Aquatic Acute 1: H400; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Flam. Sol. 1: H228; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Danger	Self-classified 10 - <25 %
CAS: 54464-57-2 EC: 259-174-3 Index: Non-applicable REACH: Non-applicable	1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one⁽¹⁾ Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning	Self-classified 5 - <10 %
CAS: 78-70-6 EC: 201-134-4 Index: 603-235-00-2 REACH: 01-2119474016-42-XXXX	Linalool⁽¹⁾ Regulation 1272/2008 Acute Tox. 4: H332; Aquatic Acute 1: H400; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Warning	Self-classified 5 - <10 %
CAS: 101-86-0 EC: 202-983-3 Index: Non-applicable REACH: Non-applicable	Hexyl cinnam-aldehyde⁽¹⁾ Regulation 1272/2008 Acute Tox. 4: H332; Aquatic Acute 1: H400; Aquatic Chronic 2: H411; Skin Sens. 1B: H317 - Warning	Self-classified 5 - <10 %
CAS: 120-51-4 EC: 204-402-9 Index: 607-085-00-9 REACH: 01-2119976371-33-XXXX	Benzyl benzoate⁽¹⁾ Regulation 1272/2008 Acute Tox. 4: H302+H312; Aquatic Acute 1: H400; Aquatic Chronic 2: H411 - Warning	Self-classified 2,5 - <5 %
CAS: 32210-23-4 EC: 250-954-9 Index: Non-applicable REACH: 01-2119976286-24-XXXX	4-tert-butylcyclohexyl acetate⁽¹⁾ Regulation 1272/2008 Skin Sens. 1B: H317 - Warning	Self-classified 2,5 - <5 %
CAS: 80-54-6 EC: 201-289-8 Index: Non-applicable REACH: 01-2119907954-30-XXXX	2-(4-tert-Butylbenzyl)propionaldehyde, Lysmeral extra⁽¹⁾ Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Chronic 3: H412; Repr. 2: H361; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning	Self-classified 2,5 - <5 %
CAS: 99-85-4 EC: 202-794-6 Index: Non-applicable REACH: 01-2120780478-40-XXXX	p-mentha-1,4-diene⁽¹⁾ Regulation 1272/2008 Aquatic Chronic 2: H411; Flam. Liq. 3: H226; Repr. 2: H361 - Warning	Self-classified 1 - <2,5 %
CAS: 127-91-3 EC: 204-872-5 Index: Non-applicable REACH: 01-2119519230-54-XXXX	Pin-2(10)-ene⁽¹⁾ Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Asp. Tox. 1: H304; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Danger	Self-classified 1 - <2,5 %
CAS: 106-24-1 EC: 203-377-1 Index: Non-applicable REACH: 01-2119552430-49-XXXX	Geraniol⁽¹⁾ Regulation 1272/2008 Acute Tox. 4: H332; Aquatic Chronic 2: H411; Eye Dam. 1: H318; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Danger	Self-classified 1 - <2,5 %

⁽¹⁾ Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830

FRA-182 - SHANGHAI

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification	Concentration
CAS: 1506-02-1 EC: 216-133-4 Index: Non-applicable REACH: 01-2119539433-40-XXXX	1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one⁽¹⁾ Self-classified Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410 - Warning	1 - <2,5 % 
CAS: 470-82-6 EC: 207-431-5 Index: Non-applicable REACH: 01-2119967772-24-XXXX	Cineole⁽¹⁾ Self-classified Regulation 1272/2008 Acute Tox. 4: H302; Flam. Liq. 3: H226; Skin Sens. 1B: H317 - Warning	1 - <2,5 % 
CAS: 67634-00-8 EC: 266-803-5 Index: Non-applicable REACH: 01-2120795456-39-XXXX	Allyl (3-methylbutoxy)acetate⁽¹⁾ Self-classified Regulation 1272/2008 Acute Tox. 2: H330; Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410 - Danger	1 - <2,5 % 
CAS: 105-87-3 EC: 203-341-5 Index: Non-applicable REACH: 01-2119973480-35-XXXX	Geranyl acetate⁽¹⁾ Self-classified Regulation 1272/2008 Aquatic Chronic 3: H412; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	<1 % 
CAS: 5392-40-5 EC: 226-394-6 Index: 605-019-00-3 REACH: 01-2119462829-23-XXXX	Citral⁽¹⁾ Self-classified Regulation 1272/2008 Acute Tox. 4: H312; Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning	<1 % 
CAS: 91-64-5 EC: 202-086-7 Index: Non-applicable REACH: 01-2119943756-26-XXXX	Coumarin⁽¹⁾ Self-classified Regulation 1272/2008 Acute Tox. 3: H301+H311+H331; Aquatic Chronic 2: H411; Skin Sens. 1: H317 - Danger	<1 % 
CAS: 123-35-3 EC: 204-622-5 Index: Non-applicable REACH: 01-2119514321-56-XXXX	7-methyl-3-methyleneocta-1,6-diene⁽¹⁾ Self-classified Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Asp. Tox. 1: H304; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Danger	<1 % 
CAS: 80-56-8 EC: 201-291-9 Index: Non-applicable REACH: 01-2119519223-49-XXXX	Pin-2(3)-ene⁽¹⁾ Self-classified Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Asp. Tox. 1: H304; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Danger	<1 % 
CAS: 5462-06-6 EC: 226-749-5 Index: Non-applicable REACH: 01-2120629103-67-XXXX	Para-anisyl propanal⁽¹⁾ Self-classified Regulation 1272/2008 Skin Sens. 1B: H317 - Warning	<1 % 
CAS: 141-27-5 EC: 205-476-5 Index: Non-applicable REACH: 01-2119911311-56-XXXX	(E)-3,7-dimethylocta-2,6-dienal⁽¹⁾ Self-classified Regulation 1272/2008 Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning	<1 % 
CAS: 97-53-0 EC: 202-589-1 Index: Non-applicable REACH: 01-2119971802-33-XXXX	Eugenol⁽¹⁾ Self-classified Regulation 1272/2008 Acute Tox. 4: H332; Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Sens. 1B: H317 - Warning	<1 % 
CAS: 106-26-3 EC: 203-379-2 Index: Non-applicable REACH: 01-2119924850-39-XXXX	(z)-citral⁽¹⁾ Self-classified Regulation 1272/2008 Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning	<1 % 
CAS: 495-61-4 EC: Non-applicable Index: Non-applicable REACH: Non-applicable	l-b-Bisabolene⁽¹⁾ Self-classified Regulation 1272/2008 Asp. Tox. 1: H304; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Danger	<1 % 
CAS: 546-28-1 EC: 208-898-8 Index: Non-applicable REACH: Non-applicable	[3R-(3α,3αβ,7β,8α)]-octahydro-3,8,8-trimethyl-6-methylene-1H-3a,7-methanoazulene⁽¹⁾ Self-classified Regulation 1272/2008 Aquatic Acute 1: H400; Asp. Tox. 1: H304 - Danger	<1 % 
CAS: 87-44-5 EC: 201-746-1 Index: Non-applicable REACH: 01-2120745237-53-XXXX	Caryophyllene⁽¹⁾ Self-classified Regulation 1272/2008 Aquatic Chronic 4: H413; Asp. Tox. 1: H304 - Danger	<1 % 
CAS: 111-80-8 EC: 203-909-2 Index: Non-applicable REACH: 01-2120139912-55-XXXX	Methyl non-2-ynoate⁽¹⁾ Self-classified Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 3: H412; Skin Irrit. 2: H315; Skin Sens. 1A: H317 - Warning	<1 % 

⁽¹⁾ Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830

FRA-182 - SHANGHAI

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	M-factor	
[3R-(3 α ,3 $\alpha\beta$,7 β ,8 $\alpha\alpha$)]-octahydro-3,8,8-trimethyl-6-methylene-1H-3a,7-methanoazulene	Acute	10
CAS: 546-28-1 EC: 208-898-8	Chronic	10

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Request medical assistance immediately, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Request medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Product is non-flammable under normal conditions of storage, manipulation and use, but the product contains flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilled product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Avoid splashes and pulverizations. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT. Transfer in designated areas that comply with the necessary safety conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See section 8). Limit manual transfers to small amounts only. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.:	5 °C
Maximum Temp.:	30 °C
Maximum time:	6 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace

There are no occupational exposure limits for the substances contained in the product

DNEL (Workers):

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
d-limonene CAS: 5989-27-5 EC: 227-813-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	33,3 mg/m ³	Non-applicable
Linalyl acetate CAS: 115-95-7 EC: 204-116-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2,75 mg/m ³	Non-applicable
Linalool CAS: 78-70-6 EC: 201-134-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	5 mg/kg	Non-applicable	2,5 mg/kg	Non-applicable
	Inhalation	16,5 mg/m ³	Non-applicable	2,8 mg/m ³	Non-applicable
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2,6 mg/kg	Non-applicable
	Inhalation	102 mg/m ³	Non-applicable	5,1 mg/m ³	Non-applicable
2-(4-tert-Butylbenzyl)propionaldehyde, Lysmeral extra CAS: 80-54-6 EC: 201-289-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	20 mg/kg	Non-applicable	3,33 mg/kg	Non-applicable
	Inhalation	0,29 mg/m ³	0,29 mg/m ³	0,048 mg/m ³	0,048 mg/m ³
Pin-2(10)-ene CAS: 127-91-3 EC: 204-872-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	5,98 mg/m ³	Non-applicable
Geraniol CAS: 106-24-1 EC: 203-377-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	8,3 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	29,4 mg/m ³	Non-applicable
1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one CAS: 1506-02-1 EC: 216-133-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	1,8 mg/kg	Non-applicable	0,61 mg/kg	Non-applicable
	Inhalation	0,525 mg/m ³	Non-applicable	0,175 mg/m ³	Non-applicable
Cineole CAS: 470-82-6 EC: 207-431-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	7,05 mg/m ³	Non-applicable
Geranyl acetate CAS: 105-87-3 EC: 203-341-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	35,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	62,59 mg/m ³	Non-applicable
Citral CAS: 5392-40-5 EC: 226-394-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,7 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	9 mg/m ³	Non-applicable
Coumarin CAS: 91-64-5 EC: 202-086-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,84 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,741 mg/m ³	Non-applicable
7-methyl-3-methylenoocta-1,6-diene CAS: 123-35-3 EC: 204-622-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,83 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	5,83 mg/m ³	Non-applicable
Pin-2(3)-ene CAS: 80-56-8 EC: 201-291-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	5,98 mg/m ³	Non-applicable
Eugenol CAS: 97-53-0 EC: 202-589-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	36 mg/m ³	Non-applicable
(z)-citral CAS: 106-26-3 EC: 203-379-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,7 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	9 mg/m ³	Non-applicable

DNEL (General population):

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
d-limonene CAS: 5989-27-5 EC: 227-813-5	Oral	Non-applicable	Non-applicable	4,76 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	8,33 mg/m ³	Non-applicable
Linalyl acetate CAS: 115-95-7 EC: 204-116-4	Oral	Non-applicable	Non-applicable	0,2 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,25 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,68 mg/m ³	Non-applicable
Linalool CAS: 78-70-6 EC: 201-134-4	Oral	1,2 mg/kg	Non-applicable	0,2 mg/kg	Non-applicable
	Dermal	2,5 mg/kg	Non-applicable	1,25 mg/kg	Non-applicable
	Inhalation	4,1 mg/m ³	Non-applicable	0,7 mg/m ³	Non-applicable
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	Oral	78 mg/kg	Non-applicable	0,4 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,3 mg/kg	Non-applicable
	Inhalation	25 mg/m ³	Non-applicable	1,25 mg/m ³	Non-applicable
2-(4-tert-Butylbenzyl)propionaldehyde, Lysmeral extra CAS: 80-54-6 EC: 201-289-8	Oral	0,041 mg/kg	Non-applicable	0,007 mg/kg	Non-applicable
	Dermal	20 mg/kg	Non-applicable	1,67 mg/kg	Non-applicable
	Inhalation	0,07 mg/m ³	0,07 mg/m ³	0,012 mg/m ³	0,012 mg/m ³
Pin-2(10)-ene CAS: 127-91-3 EC: 204-872-5	Oral	Non-applicable	Non-applicable	0,31 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1,06 mg/m ³	Non-applicable
Geraniol CAS: 106-24-1 EC: 203-377-1	Oral	Non-applicable	Non-applicable	2,5 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	8,7 mg/m ³	Non-applicable
1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one CAS: 1506-02-1 EC: 216-133-4	Oral	1,2 mg/kg	Non-applicable	0,0125 mg/kg	Non-applicable
	Dermal	0,915 mg/kg	Non-applicable	0,305 mg/kg	Non-applicable
	Inhalation	0,131 mg/m ³	Non-applicable	0,0435 mg/m ³	Non-applicable
Cineole CAS: 470-82-6 EC: 207-431-5	Oral	Non-applicable	Non-applicable	600 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1,74 mg/m ³	Non-applicable
Geranyl acetate CAS: 105-87-3 EC: 203-341-5	Oral	Non-applicable	Non-applicable	8,9 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	17,75 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	15,4 mg/m ³	Non-applicable
Citral CAS: 5392-40-5 EC: 226-394-6	Oral	Non-applicable	Non-applicable	0,6 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2,7 mg/m ³	Non-applicable
Coumarin CAS: 91-64-5 EC: 202-086-7	Oral	Non-applicable	Non-applicable	0,42 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,42 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,183 mg/m ³	Non-applicable
7-methyl-3-methylenoocta-1,6-diene CAS: 123-35-3 EC: 204-622-5	Oral	Non-applicable	Non-applicable	0,42 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,42 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1,25 mg/m ³	Non-applicable
Pin-2(3)-ene CAS: 80-56-8 EC: 201-291-9	Oral	Non-applicable	Non-applicable	0,31 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1,06 mg/m ³	Non-applicable
(z)-citral CAS: 106-26-3 EC: 203-379-2	Oral	Non-applicable	Non-applicable	0,6 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2,7 mg/m ³	Non-applicable

PNEC:

Identification				
d-limonene CAS: 5989-27-5 EC: 227-813-5	STP	1,8 mg/L	Fresh water	0,0054 mg/L
	Soil	0,262 mg/kg	Marine water	0,00054 mg/L
	Intermittent	Non-applicable	Sediment (Fresh water)	1,32 mg/kg
	Oral	3,33 g/kg	Sediment (Marine water)	0,13 mg/kg

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Linalyl acetate CAS: 115-95-7 EC: 204-116-4	STP	10 mg/L	Fresh water	0,011 mg/L
	Soil	0,115 mg/kg	Marine water	0,0011 mg/L
	Intermittent	0,11 mg/L	Sediment (Fresh water)	0,609 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0609 mg/kg
Linalool CAS: 78-70-6 EC: 201-134-4	STP	10 mg/L	Fresh water	0,2 mg/L
	Soil	0,327 mg/kg	Marine water	0,02 mg/L
	Intermittent	2 mg/L	Sediment (Fresh water)	2,22 mg/kg
	Oral	7,8 g/kg	Sediment (Marine water)	0,222 mg/kg
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	STP	100 mg/L	Fresh water	0,0168 mg/L
	Soil	2,12 mg/kg	Marine water	0,00168 mg/L
	Intermittent	Non-applicable	Sediment (Fresh water)	10,66 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	1,07 mg/kg
4-tert-butylcyclohexyl acetate CAS: 32210-23-4 EC: 250-954-9	STP	12,2 mg/L	Fresh water	0,0053 mg/L
	Soil	0,42 mg/kg	Marine water	0,00053 mg/L
	Intermittent	0,053 mg/L	Sediment (Fresh water)	2,01 mg/kg
	Oral	66,67 g/kg	Sediment (Marine water)	0,21 mg/kg
2-(4-tert-Butylbenzyl)propionaldehyde, Lysmeral extra CAS: 80-54-6 EC: 201-289-8	STP	1,049 mg/L	Fresh water	0,00204 mg/L
	Soil	0,0463 mg/kg	Marine water	0,00024 mg/L
	Intermittent	0,0204 mg/L	Sediment (Fresh water)	0,0584 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,00584 mg/kg
Pin-2(10)-ene CAS: 127-91-3 EC: 204-872-5	STP	3,26 mg/L	Fresh water	0,002 mg/L
	Soil	0,49 mg/kg	Marine water	0,0002 mg/L
	Intermittent	Non-applicable	Sediment (Fresh water)	0,485 mg/kg
	Oral	1,35 g/kg	Sediment (Marine water)	0,048 mg/kg
Geraniol CAS: 106-24-1 EC: 203-377-1	STP	0,7 mg/L	Fresh water	0,0108 mg/L
	Soil	0,0167 mg/kg	Marine water	0,00108 mg/L
	Intermittent	0,108 mg/L	Sediment (Fresh water)	0,115 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0115 mg/kg
1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one CAS: 1506-02-1 EC: 216-133-4	STP	2,2 mg/L	Fresh water	0,0022 mg/L
	Soil	0,31 mg/kg	Marine water	0,00022 mg/L
	Intermittent	0,00072 mg/L	Sediment (Fresh water)	1,72 mg/kg
	Oral	1,1 g/kg	Sediment (Marine water)	0,345 mg/kg
Cineole CAS: 470-82-6 EC: 207-431-5	STP	10 mg/L	Fresh water	0,057 mg/L
	Soil	0,2 mg/kg	Marine water	0,0057 mg/L
	Intermittent	0,57 mg/L	Sediment (Fresh water)	0,06732 mg/kg
	Oral	133 g/kg	Sediment (Marine water)	0,00673 mg/kg
Geranyl acetate CAS: 105-87-3 EC: 203-341-5	STP	8 mg/L	Fresh water	0,00372 mg/L
	Soil	0,0859 mg/kg	Marine water	0,000372 mg/L
	Intermittent	0,0372 mg/L	Sediment (Fresh water)	0,442 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0442 mg/kg
Citral CAS: 5392-40-5 EC: 226-394-6	STP	1,6 mg/L	Fresh water	0,00678 mg/L
	Soil	0,0209 mg/kg	Marine water	0,000678 mg/L
	Intermittent	0,0678 mg/L	Sediment (Fresh water)	0,125 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0125 mg/kg
Coumarin CAS: 91-64-5 EC: 202-086-7	STP	10 mg/L	Fresh water	0,0056 mg/L
	Soil	0,0217 mg/kg	Marine water	0,00056 mg/L
	Intermittent	0,056 mg/L	Sediment (Fresh water)	0,207 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0207 mg/kg
7-methyl-3-methylenoocta-1,6-diene CAS: 123-35-3 EC: 204-622-5	STP	0,2 mg/L	Fresh water	0,008 mg/L
	Soil	1,015 mg/kg	Marine water	0,0008 mg/L
	Intermittent	Non-applicable	Sediment (Fresh water)	5,022 mg/kg
	Oral	2,78 g/kg	Sediment (Marine water)	0,502 mg/kg

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Pin-2(3)-ene CAS: 80-56-8 EC: 201-291-9	STP	3,26 mg/L	Fresh water	0,004 mg/L
	Soil	0,539 mg/kg	Marine water	0,0004 mg/L
	Intermittent	Non-applicable	Sediment (Fresh water)	1,033 mg/kg
	Oral	1,35 g/kg	Sediment (Marine water)	0,103 mg/kg
Eugenol CAS: 97-53-0 EC: 202-589-1	STP	Non-applicable	Fresh water	0,00113 mg/L
	Soil	0,0155 mg/kg	Marine water	0,000113 mg/L
	Intermittent	0,0113 mg/L	Sediment (Fresh water)	0,081 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0081 mg/kg
(z)-citral CAS: 106-26-3 EC: 203-379-2	STP	1,6 mg/L	Fresh water	0,00678 mg/L
	Soil	0,0209 mg/kg	Marine water	0,000678 mg/L
	Intermittent	0,0678 mg/L	Sediment (Fresh water)	0,125 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0125 mg/kg

8.2 Exposure controls:

A.- General security and hygiene measures in the work place



In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the occupational exposure limits. In case of using personal protective equipment it should have CE marking in accordance with Directive 2016/425/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection



The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2003+A1:2009 and EN ISO 374-1:2016

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"

D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2001 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection



Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing			Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes		EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

F.- Additional emergency measures

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	61,37 % weight
V.O.C. density at 20 °C:	539,59 kg/m ³ (539,59 g/L)
Average carbon number:	10
Average molecular weight:	139,08 g/mol

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Not available
Colour:	Not available
Odour:	Not available
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	204 °C
Vapour pressure at 20 °C:	147 Pa
Vapour pressure at 50 °C:	816,2 Pa (0,82 kPa)
Evaporation rate at 20 °C:	Non-applicable *

Product description:

Density at 20 °C:	879,2 kg/m ³
Relative density at 20 °C:	0,879
Dynamic viscosity at 20 °C:	0 cP
Kinematic viscosity at 20 °C:	0 cSt
Kinematic viscosity at 40 °C:	<20,5 cSt
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Flammability:

Flash Point:	63 °C
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	225 °C
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

Explosive:

Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *

9.2 Other information:

Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Precaution	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Inhalation after prolonged exposure may be lethal.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
IARC: d-limonene (3); Coumarin (3); 7-methyl-3-methyleneocta-1,6-diene (2B); Eugenol (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Suspected of damaging fertility or the unborn child

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

The consumption of a considerable dose can cause pulmonary damage.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
d-limonene CAS: 5989-27-5 EC: 227-813-5	LD50 oral	4400 mg/kg	Rat
	LD50 dermal	5100 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Linalyl acetate CAS: 115-95-7 EC: 204-116-4	LD50 oral	14500 mg/kg	Rat
	LD50 dermal	5610 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Linalool CAS: 78-70-6 EC: 201-134-4	LD50 oral	3000 mg/kg	Rat
	LD50 dermal	5610 mg/kg (ATEi)	Rabbit
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Hexyl cinnam-aldehyde CAS: 101-86-0 EC: 202-983-3	LD50 oral	3100 mg/kg	Rat
	LD50 dermal	3000 mg/kg (ATEi)	Rabbit
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	LD50 oral	1500 mg/kg	Rat
	LD50 dermal	4000 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Geraniol CAS: 106-24-1 EC: 203-377-1	LD50 oral	4200 mg/kg	Rat
	LD50 dermal	5100 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Coumarin CAS: 91-64-5 EC: 202-086-7	LD50 oral	293 mg/kg	Rat
	LD50 dermal	293 mg/kg (ATEi)	Rat
	LC50 inhalation	3 mg/L (4 h) (ATEi)	
4-tert-butylcyclohexyl acetate CAS: 32210-23-4 EC: 250-954-9	LD50 oral	3370 mg/kg	
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
2-(4-tert-Butylbenzyl)propionaldehyde, Lysmeral extra CAS: 80-54-6 EC: 201-289-8	LD50 oral	1390 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
p-mentha-1,4-diene CAS: 99-85-4 EC: 202-794-6	LD50 oral	3850 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Allyl (3-methylbutoxy)acetate CAS: 67634-00-8 EC: 266-803-5	LD50 oral	500 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	0,51 mg/L (4 h)	Rat
1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one CAS: 1506-02-1 EC: 216-133-4	LD50 oral	1000 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Cineole CAS: 470-82-6 EC: 207-431-5	LD50 oral	2480 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Citral CAS: 5392-40-5 EC: 226-394-6	LD50 oral	4950 mg/kg	Rat
	LD50 dermal	2250 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Pin-2(3)-ene CAS: 80-56-8 EC: 201-291-9	LD50 oral	3700 mg/kg	Rat
	LD50 dermal	5100 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Para-anisyl propanal CAS: 5462-06-6 EC: 226-749-5	LD50 oral	4500 mg/kg	
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
(E)-3,7-dimethylocta-2,6-dienal CAS: 141-27-5 EC: 205-476-5	LD50 oral	6800 mg/kg	Rat
	LD50 dermal	2250 mg/kg	
	LC50 inhalation	Non-applicable	
Eugenol CAS: 97-53-0 EC: 202-589-1	LD50 oral	2300 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
(z)-citral CAS: 106-26-3 EC: 203-379-2	LD50 oral	6800 mg/kg	Rat
	LD50 dermal	2250 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Caryophyllene CAS: 87-44-5 EC: 201-746-1	LD50 oral	5500 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Methyl non-2-ynoate CAS: 111-80-8 EC: 203-909-2	LD50 oral	1600 mg/kg	Rat
	LD50 dermal	4500 mg/kg	
	LC50 inhalation	Non-applicable	

Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	15329,29 mg/kg (Calculation method)	8,02 %
Dermal	58402,22 mg/kg (Calculation method)	20,27 %
Inhalation	5,25 mg/L (4 h) (Calculation method)	83,77 %

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Species	Genus
d-limonene CAS: 5989-27-5 EC: 227-813-5	LC50	0.702 mg/L (96 h)	Pimephales promelas	Fish
	EC50	0.577 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
Linalyl acetate CAS: 115-95-7 EC: 204-116-4	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L (48 h)		Crustacean
	EC50	0.1 - 1 mg/L (72 h)		Algae
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one CAS: 54464-57-2 EC: 259-174-3	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L		Crustacean
	EC50	0.1 - 1 mg/L		Algae
Linalool CAS: 78-70-6 EC: 201-134-4	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L (48 h)		Crustacean
	EC50	0.1 - 1 mg/L (96 h)		Algae
Hexyl cinnam-aldehyde CAS: 101-86-0 EC: 202-983-3	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L		Crustacean
	EC50	0.1 - 1 mg/L		Algae
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L (48 h)		Crustacean
	EC50	0.1 - 1 mg/L (72 h)		Algae
2-(4-tert-Butylbenzyl)propionaldehyde, Lysmeral extra CAS: 80-54-6 EC: 201-289-8	LC50	2 mg/L (96 h)	Danio rerio	Fish
	EC50	11 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	29 mg/L (72 h)	Desmodesmus subspicatus	Algae
p-mentha-1,4-diene CAS: 99-85-4 EC: 202-794-6	LC50	2.8 mg/L (96 h)	N/A	Fish
	EC50	10.2 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
Pin-2(10)-ene CAS: 127-91-3 EC: 204-872-5	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L		Crustacean
	EC50	0.1 - 1 mg/L		Algae
Geraniol CAS: 106-24-1 EC: 203-377-1	LC50	1 - 10 mg/L (96 h)		Fish
	EC50	1 - 10 mg/L		Crustacean
	EC50	1 - 10 mg/L		Algae
1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one CAS: 1506-02-1 EC: 216-133-4	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L		Crustacean
	EC50	0.1 - 1 mg/L		Algae
Allyl (3-methylbutoxy)acetate CAS: 67634-00-8 EC: 266-803-5	LC50	0.77 mg/L (96 h)	N/A	Fish
	EC50	5.09 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	2.06 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae
Geranyl acetate CAS: 105-87-3 EC: 203-341-5	LC50	10 - 100 mg/L (96 h)		Fish
	EC50	10 - 100 mg/L		Crustacean
	EC50	10 - 100 mg/L		Algae
Citral CAS: 5392-40-5 EC: 226-394-6	LC50	1 - 10 mg/L (96 h)		Fish
	EC50	1 - 10 mg/L (24 h)		Crustacean
	EC50	1 - 10 mg/L (72 h)		Algae
Coumarin CAS: 91-64-5 EC: 202-086-7	LC50	1.3 mg/L (96 h)	QSAR	Fish
	EC50	8 mg/L (48 h)	QSAR	Fish
	EC50	1.4 mg/L (96 h)	QSAR	Fish
7-methyl-3-methyleneocta-1,6-diene CAS: 123-35-3 EC: 204-622-5	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L		Crustacean
	EC50	0.1 - 1 mg/L		Algae
Pin-2(3)-ene CAS: 80-56-8 EC: 201-291-9	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L		Crustacean
	EC50	0.1 - 1 mg/L		Algae
(E)-3,7-dimethylocta-2,6-dienal CAS: 141-27-5 EC: 205-476-5	LC50	6.78 mg/L (96 h)	Leuciscus idus	Fish
	EC50	6.5 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	104 mg/L (72 h)	Scenedesmus subspicatus	Algae

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Species	Genus
Eugenol CAS: 97-53-0 EC: 202-589-1	LC50	1 - 10 mg/L (96 h)		Fish
	EC50	1 - 10 mg/L		Crustacean
	EC50	1 - 10 mg/L		Algae
(z)-citral CAS: 106-26-3 EC: 203-379-2	LC50	7 mg/L (96 h)	Leuciscus idus	Fish
	EC50	7 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	104 mg/L (72 h)	Desmodesmus subspicatus	Algae
[3R-(3 α ,3 β ,7 β ,8 α)]-octahydro-3,8,8-trimethyl-6-methylene-1H-3a,7-methanoazulene CAS: 546-28-1 EC: 208-898-8	LC50	Non-applicable		
	EC50	0.015 mg/L (48 h)	QSAR	Fish
	EC50	Non-applicable		
Methyl non-2-ynoate CAS: 111-80-8 EC: 203-909-2	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L		Crustacean
	EC50	0.1 - 1 mg/L		Algae

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
d-limonene CAS: 5989-27-5 EC: 227-813-5	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	100 %
Linalyl acetate CAS: 115-95-7 EC: 204-116-4	BOD5	Non-applicable	Concentration	81 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	80 %
Linalool CAS: 78-70-6 EC: 201-134-4	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	0.55	% Biodegradable	90 %
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	94 %
2-(4-tert-Butylbenzyl)propionaldehyde, Lysmeral extra CAS: 80-54-6 EC: 201-289-8	BOD5	Non-applicable	Concentration	20 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	81 %
p-mentha-1,4-diene CAS: 99-85-4 EC: 202-794-6	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	27 %
Geraniol CAS: 106-24-1 EC: 203-377-1	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	21 days
	BOD5/COD	Non-applicable	% Biodegradable	70 %
Allyl (3-methylbutoxy)acetate CAS: 67634-00-8 EC: 266-803-5	BOD5	Non-applicable	Concentration	240 mg/L
	COD	Non-applicable	Period	13 days
	BOD5/COD	Non-applicable	% Biodegradable	78 %
Citral CAS: 5392-40-5 EC: 226-394-6	BOD5	0.56 g O ₂ /g	Concentration	100 mg/L
	COD	1.99 g O ₂ /g	Period	28 days
	BOD5/COD	0.28	% Biodegradable	92 %
Coumarin CAS: 91-64-5 EC: 202-086-7	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	100 %
7-methyl-3-methyleneocta-1,6-diene CAS: 123-35-3 EC: 204-622-5	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	86 %
Pin-2(3)-ene CAS: 80-56-8 EC: 201-291-9	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	95 %
(E)-3,7-dimethylocta-2,6-dienal CAS: 141-27-5 EC: 205-476-5	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	95 %

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Degradability		Biodegradability	
	(z)-citral CAS: 106-26-3 EC: 203-379-2	BOD5	Non-applicable	Concentration
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	90 %
Methyl non-2-ynoate CAS: 111-80-8 EC: 203-909-2	BOD5	Non-applicable	Concentration	30 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	71 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
	d-limonene CAS: 5989-27-5 EC: 227-813-5	BCF
	Pow Log	4.83
	Potential	High
Linalyl acetate CAS: 115-95-7 EC: 204-116-4	BCF	174
	Pow Log	3.9
	Potential	High
Linalool CAS: 78-70-6 EC: 201-134-4	BCF	39
	Pow Log	2.97
	Potential	Moderate
Hexyl cinnam-aldehyde CAS: 101-86-0 EC: 202-983-3	BCF	17
	Pow Log	
	Potential	Low
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	BCF	193
	Pow Log	4
	Potential	High
2-(4-tert-Butylbenzyl)propionaldehyde, Lysmeral extra CAS: 80-54-6 EC: 201-289-8	BCF	275
	Pow Log	4.2
	Potential	High
Pin-2(10)-ene CAS: 127-91-3 EC: 204-872-5	BCF	440
	Pow Log	4.35
	Potential	High
Geraniol CAS: 106-24-1 EC: 203-377-1	BCF	110
	Pow Log	3.56
	Potential	High
1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one CAS: 1506-02-1 EC: 216-133-4	BCF	
	Pow Log	6.37
	Potential	
Cineole CAS: 470-82-6 EC: 207-431-5	BCF	
	Pow Log	2.74
	Potential	
Allyl (3-methylbutoxy)acetate CAS: 67634-00-8 EC: 266-803-5	BCF	
	Pow Log	1.85
	Potential	
Citral CAS: 5392-40-5 EC: 226-394-6	BCF	10
	Pow Log	3.45
	Potential	Low
7-methyl-3-methyleneocta-1,6-diene CAS: 123-35-3 EC: 204-622-5	BCF	324
	Pow Log	5.29
	Potential	High
Pin-2(3)-ene CAS: 80-56-8 EC: 201-291-9	BCF	2800
	Pow Log	4.83
	Potential	Very High
(E)-3,7-dimethylocta-2,6-dienal CAS: 141-27-5 EC: 205-476-5	BCF	
	Pow Log	2.76
	Potential	

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Bioaccumulation potential	
Eugenol CAS: 97-53-0 EC: 202-589-1	BCF	31
	Pow Log	2.27
	Potential	Moderate
[3R-(3 α ,3 α ,7 β ,8 α)]-octahydro-3,8,8-trimethyl-6-methylene-1H-3a,7-methanoazulene CAS: 546-28-1 EC: 208-898-8	BCF	6000
	Pow Log	5.82
	Potential	Very High

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
d-limonene CAS: 5989-27-5 EC: 227-813-5	Koc	6324	Henry	Non-applicable
	Conclusion	Immobile	Dry soil	Non-applicable
	Surface tension	2,675E-2 N/m (25 °C)	Moist soil	Non-applicable
Linalyl acetate CAS: 115-95-7 EC: 204-116-4	Koc	518	Henry	177 Pa·m ³ /mol
	Conclusion	Low	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	Koc	6310	Henry	Non-applicable
	Conclusion	Immobile	Dry soil	Non-applicable
	Surface tension	4,626E-2 N/m (25 °C)	Moist soil	Non-applicable
2-(4-tert-Butylbenzyl)propionaldehyde, Lysmeral extra CAS: 80-54-6 EC: 201-289-8	Koc	1285	Henry	2,52 Pa·m ³ /mol
	Conclusion	Low	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
p-mentha-1,4-diene CAS: 99-85-4 EC: 202-794-6	Koc	8038	Henry	Non-applicable
	Conclusion	Immobile	Dry soil	Non-applicable
	Surface tension	2,991E-2 N/m (25 °C)	Moist soil	Non-applicable
Pin-2(10)-ene CAS: 127-91-3 EC: 204-872-5	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2,685E-2 N/m (25 °C)	Moist soil	Non-applicable
Cineole CAS: 470-82-6 EC: 207-431-5	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	3,24E-2 N/m (25 °C)	Moist soil	Non-applicable
Allyl (3-methylbutoxy)acetate CAS: 67634-00-8 EC: 266-803-5	Koc	80	Henry	Non-applicable
	Conclusion	Very High	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable
7-methyl-3-methyleneocta-1,6-diene CAS: 123-35-3 EC: 204-622-5	Koc	1300	Henry	6515,2 Pa·m ³ /mol
	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Yes
Pin-2(3)-ene CAS: 80-56-8 EC: 201-291-9	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2,587E-2 N/m (25 °C)	Moist soil	Non-applicable
(E)-3,7-dimethylocta-2,6-dienal CAS: 141-27-5 EC: 205-476-5	Koc	15	Henry	Non-applicable
	Conclusion	Very High	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable
(z)-citral CAS: 106-26-3 EC: 203-379-2	Koc	148	Henry	3,76E-4 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	No
	Surface tension	Non-applicable	Moist soil	No
[3R-(3 α ,3 α ,7 β ,8 α)]-octahydro-3,8,8-trimethyl-6-methylene-1H-3a,7-methanoazulene CAS: 546-28-1 EC: 208-898-8	Koc	21700	Henry	39111,5 Pa·m ³ /mol
	Conclusion	Immobile	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
07 01 04*	other organic solvents, washing liquids and mother liquors	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity, HP10 Toxic for reproduction, HP13 Sensitising, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:



In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION



Transport of dangerous goods by land:

With regard to ADR 2019 and RID 2019:

 	14.1 UN number:	UN2810
	14.2 UN proper shipping name:	TOXIC LIQUID, ORGANIC, N.O.S. (d-limonene)
	14.3 Transport hazard class(es):	6.1
	Labels:	6.1
	14.4 Packing group:	III
	14.5 Environmental hazards:	Yes
	14.6 Special precautions for user	
Special regulations:	274, 614	
Tunnel restriction code:	E	
Physico-Chemical properties:	see section 9	
Limited quantities:	5 L	
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:	Non-applicable	

Transport of dangerous goods by sea:

With regard to IMDG 39-18:

 	14.1 UN number:	UN2810
	14.2 UN proper shipping name:	TOXIC LIQUID, ORGANIC, N.O.S. (d-limonene)
	14.3 Transport hazard class(es):	6.1
	Labels:	6.1
	14.4 Packing group:	III
	14.5 Environmental hazards:	Yes
	14.6 Special precautions for user	
Special regulations:	274, 223	
EmS Codes:	F-A, S-A	
Physico-Chemical properties:	see section 9	
Limited quantities:	5 L	
Segregation group:	Non-applicable	
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:	Non-applicable	

Transport of dangerous goods by air:

With regard to IATA/ICAO 2020:

- CONTINUED ON NEXT PAGE -

FRA-182 - SHANGHAI

SECTION 14: TRANSPORT INFORMATION (continued)



14.1 UN number:	UN2810
14.2 UN proper shipping name:	TOXIC LIQUID, ORGANIC, N.O.S. (d-limonene)
14.3 Transport hazard class(es):	6.1
Labels:	6.1
14.4 Packing group:	III
14.5 Environmental hazards:	Yes
14.6 Special precautions for user	
Physico-Chemical properties:	see section 9
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:	Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Geraniol (Product-type 18, 19)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
H2		50	200
E1		100	200

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

Texts of the legislative phrases mentioned in section 2:

- H315: Causes skin irritation
- H317: May cause an allergic skin reaction
- H400: Very toxic to aquatic life
- H411: Toxic to aquatic life with long lasting effects
- H361: Suspected of damaging fertility or the unborn child
- H331: Toxic if inhaled
- H304: May be fatal if swallowed and enters airways
- H319: Causes serious eye irritation

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continued)

CLP Regulation (EC) No 1272/2008:

Acute Tox. 2: H330 - Fatal if inhaled
Acute Tox. 3: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
Acute Tox. 4: H302 - Harmful if swallowed
Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin
Acute Tox. 4: H312 - Harmful in contact with skin
Acute Tox. 4: H332 - Harmful if inhaled
Aquatic Acute 1: H400 - Very toxic to aquatic life
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects
Aquatic Chronic 4: H413 - May cause long lasting harmful effects to aquatic life
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways
Eye Dam. 1: H318 - Causes serious eye damage
Eye Irrit. 2: H319 - Causes serious eye irritation
Flam. Liq. 3: H226 - Flammable liquid and vapour
Flam. Sol. 1: H228 - Flammable solid
Repr. 2: H361 - Suspected of damaging fertility or the unborn child
Skin Irrit. 2: H315 - Causes skin irritation
Skin Sens. 1: H317 - May cause an allergic skin reaction
Skin Sens. 1A: H317 - May cause an allergic skin reaction
Skin Sens. 1B: H317 - May cause an allergic skin reaction

Classification procedure:

Skin Irrit. 2: Calculation method
Skin Sens. 1B: Calculation method
Aquatic Acute 1: Calculation method
Aquatic Chronic 2: Calculation method
Repr. 2: Calculation method
Acute Tox. 3: Calculation method
Asp. Tox. 1: Calculation method
Eye Irrit. 2: Calculation method

Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>
<http://eur-lex.europa.eu>

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon