

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 2/1/2024 Revision date: 2/9/2021 Supersedes version of: 6/15/2018 Version: 1.0

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture

 Trade name
 : TUBEROSE #EU38840F

 UFI
 : WMJF-H33Y-U00S-145Q

Product code : EU38840F

Type of product : Perfumes, fragrances
Product group : Trade product

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

## 1.2.1. Relevant identified uses

Main use category : Industrial use,Professional use Industrial/Professional use spec : For professional use only

Industrial

Use of the substance/mixture : Perfumes, fragrances Function or use category : Odour agents

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

FRENCH COLOR & FRAGRANCE International GmbH

Mittlerer Weg 35 DE 79424 Auggen

Germany

T 49-7631-931-8900

SDS@frenchcolor.com, www.frenchcolor.com

## 1.4. Emergency telephone number

Emergency number : 1-800-255-3924; +01-813-248-0585; China:+400-120-0751; Mexico:+01-800-099-0731;

Brazil: +0-800-591-6042; India: +000-800-100-4086

## **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment – Chronic Hazard, H412

Category 3

Full text of H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

Toxic to aquatic life with long lasting effects. Causes skin irritation. Causes serious eye irritation. Harmful to aquatic life with long lasting effects. May cause an allergic skin reaction.

## 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



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Signal word (CLP) : Warning

Contains : Amyl cinnamic aldehyde; Linalool; Hexyl cinnamic aldehyde; Linalyl acetate; Benzyl

salicylate; Hydroxy; Eugenol; Geraniol; Nerol; Patchouli oil; Methyl isoeugenol; Cinnamic alcohol; Cyclamal; Citrus medica limonum (Lemon) peel oil; Heliotropine; Ylang ylang oil III;

Clove Leaf Oil; Triplal (Vertocitral); Wintergreen oil

Hazard statements (CLP) : H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P302+P352 - IF ON SKIN: Wash with plenty of water.

Extra phrases : For professional users only.

#### 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

## 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Amyl cinnamic aldehyde	CAS-No.: 122-40-7 EC-No.: 204-541-5	5.6 – 11.2003	Skin Sens. 1B, H317 Aquatic Chronic 2, H411
Linalool	CAS-No.: 78-70-6 EC-No.: 201-134-4 EC Index-No.: 603-235-00-2 REACH-no: 01-2119474016-	4.3 – 8.5002	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Hexyl cinnamic aldehyde	CAS-No.: 101-86-0 EC-No.: 202-983-3 REACH-no: 01-2119533092- 50	4.1 – 8.2002	Skin Sens. 1, H317 Aquatic Chronic 2, H411
Benzyl acetate substance with national workplace exposure limit(s) (BE, DK, ES, IE, LT, LV, PT, RO)	CAS-No.: 140-11-4 EC-No.: 205-399-7 REACH-no: 01-2119638272- 42	3.9 – 7.8202	Aquatic Chronic 3, H412
Linalyl acetate	CAS-No.: 115-95-7 EC-No.: 204-116-4 REACH-no: 01-2119454789- 19	2.2 – 4.3001	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Phenylethyl alcohol	CAS-No.: 60-12-8 EC-No.: 200-456-2 REACH-no: 01-2119963921- 31	1.7 – 3.4001	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
Benzyl salicylate	CAS-No.: 118-58-1 EC-No.: 204-262-9 EC Index-No.: 607-754-00-5 REACH-no: 01-2119969442- 31	1.6 – 3.1451	Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Hydroxy	CAS-No.: 107-75-5 EC-No.: 203-518-7 REACH-no: 01-2119973482- 31	1.3 – 2.5001	Eye Irrit. 2, H319 Skin Sens. 1B, H317
Eugenol	CAS-No.: 97-53-0 EC-No.: 202-589-1 REACH-no: 01-2119971802- 33	1.1 – 2.2001	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Methyl anthranilate	CAS-No.: 134-20-3 EC-No.: 205-132-4	1 – 1.9001	Eye Irrit. 2, H319
tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans)	CAS-No.: 63500-71-0 EC-No.: 405-040-6 EC Index-No.: 603-101-00-3 REACH-no: 01-000015458-64	0.4 – 1.6	Eye Irrit. 2, H319
Dimethylbenzyl carbinyl butyrate(DMBCB)	CAS-No.: 10094-34-5 EC-No.: 233-221-8 REACH-no: 01-2120742578- 44	0.8 – 1.6	Skin Irrit. 2, H315 Aquatic Chronic 3, H412
Terpineol	CAS-No.: 8000-41-7 EC-No.: 232-268-1	0.8 – 1.5725	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Patchouli oil	CAS-No.: 8014-09-3 EC Index-No.: 616-944-7	0.7 – 1.3	Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
2(3H)-Furanone, 5-heptyldihydro-	CAS-No.: 104-67-6 EC-No.: 203-225-4 REACH-no: 01-2119959333- 34	0.6 – 1.2	Aquatic Chronic 3, H412
Geraniol	CAS-No.: 106-24-1 EC-No.: 203-377-1 EC Index-No.: 603-241-00-5 REACH-no: 01-2119552430-	0.6 – 1.19856	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
Methyl isoeugenol	CAS-No.: 93-16-3 EC-No.: 202-224-6 REACH-no: 01-2120223689- 47	0.5 – 0.9	Skin Sens. 1B, H317
Cinnamic alcohol	CAS-No.: 104-54-1 EC-No.: 203-212-3 REACH-no: 01-2119934496- 29	0.5 – 0.9	Acute Tox. 4 (Oral), H302 Skin Sens. 1B, H317

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Cyclamal	CAS-No.: 103-95-7 EC-No.: 203-161-7 REACH-no: 01-2119970582- 32	0.5 – 0.9	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Chronic 2, H411
Nerol	CAS-No.: 106-25-2 EC-No.: 203-378-7	0.4 – 0.79904	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
benzyl alcohol substance with national workplace exposure limit(s) (BG, CZ, DE, FI, LT, LV, PL, SI, CH)	CAS-No.: 100-51-6 EC-No.: 202-859-9 EC Index-No.: 603-057-00-5 REACH-no: 01-2119492630-	0.3 – 0.6375	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Citrus medica limonum (Lemon) peel oil	CAS-No.: 8008-56-8 EC-No.: 284-515-8	0.3 – 0.6375	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Repr. 2, H361 Aquatic Chronic 2, H411
ACETYL HEXAMETHYL TETRALIN	CAS-No.: 21145-77-7 EC-No.: 244-240-6	0.2 – 0.4	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Heliotropine	CAS-No.: 120-57-0 EC-No.: 204-409-7 REACH-no: 01-2119983608- 21	0.2 – 0.4	Skin Sens. 1B, H317
Ylang ylang oil III	CAS-No.: 8006-81-3 EC-No.: 281-092-1, 616-893- 0	0.2 – 0.4	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
Clove Leaf Oil	CAS-No.: 8000-34-8 EC-No.: 616-772-2	0.2 – 0.4	Eye Irrit. 2, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304
Triplal (Vertocitral)	CAS-No.: 68039-49-6 EC-No.: 268-264-1	0.1 – 0.255	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Wintergreen oil	CAS-No.: 68917-75-9 EC-No.: 614-802-9	0.1 – 0.255	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 2, H361 Aquatic Chronic 3, H412
Indole crystals	CAS-No.: 120-72-9 EC-No.: 204-420-7	0.1 – 0.1	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Eye Dam. 1, H318

Full text of H- and EUH-statements: see section 16

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

First-aid measures general

: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

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First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow affected person to

breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water,

followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Get medical advice/attention. on this label). If skin irritation occurs: Get medical advice/attention. Wash skin with plenty of water. Take off contaminated

clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison

center or a doctor if you feel unwell.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

## **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media : Sand. Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

## 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

## 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes.

Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew

with proper protection. For further information refer to section 8: "Exposure

controls/personal protection".

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or

diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

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Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

See Section 8. Exposure controls and personal protection. For further information refer to section 13.

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wash hands and other exposed areas with mild

soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this

product. Always wash hands after handling the product. Contaminated work clothing should

not be allowed out of the workplace.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep away

from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep

container closed when not in use. Store in a well-ventilated place. Keep cool. Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : 25 °C

Storage area : Store in a well-ventilated place. Store away from heat.

Special rules on packaging : Store in a closed container.

Packaging materials : Do not store in corrodable metal.

## 7.3. Specific end use(s)

No additional information available

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

Benzyl acetate (140-11-4)		
Belgium - Occupational Exposure Limits		
OEL TWA	62 mg/m³	
	10 ppm	
Denmark - Occupational Exposure Limits		
OEL TWA	61 mg/m³	
	10 ppm	
OEL STEL	122 mg/m³	
	20 ppm	
Ireland - Occupational Exposure Limits		
OEL TWA	10 ppm	
OEL STEL	30 ppm (calculated)	
Latvia - Occupational Exposure Limits		
OEL TWA	5 mg/m³	

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Benzyl acetate (140-11-4)		
Lithuania - Occupational Exposure Limits		
IPRV (OEL TWA)	5 mg/m³	
Portugal - Occupational Exposure Limits		
OEL TWA	10 ppm	
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen	
Romania - Occupational Exposure Limits		
OEL TWA	50 mg/m³	
	8 ppm	
OEL STEL	80 mg/m³	
	13 ppm	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA)	62 mg/m³	
	10 ppm	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	10 ppm	
ACGIH chemical category	Not Classifiable as a Human Carcinogen	
benzyl alcohol (100-51-6)		
Bulgaria - Occupational Exposure Limits		
OEL TWA	5 mg/m³	
Czech Republic - Occupational Exposure Limits		
PEL (OEL TWA)	40 mg/m³	
Finland - Occupational Exposure Limits		
HTP (OEL TWA)	45 mg/m³	
	10 ppm	
Germany - Occupational Exposure Limits (TRGS 900)		
AGW (OEL TWA)	22 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)	
	5 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)	
Chemical category	Skin notation	
Latvia - Occupational Exposure Limits		
OEL TWA	5 mg/m³	
Lithuania - Occupational Exposure Limits		
IPRV (OEL TWA)	5 mg/m³	
OEL chemical category	Skin notation	
Poland - Occupational Exposure Limits		
NDS (OEL TWA)	240 mg/m³	
Slovenia - Occupational Exposure Limits		
OEL TWA	22 mg/m³	

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benzyl alcohol (100-51-6)	
	5 ppm
OEL STEL	44 mg/m³
	10 ppm
OEL chemical category	Potential for cutaneous absorption
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	22 mg/m³ (aerosol, vapour)
	5 ppm (aerosol, vapour)
OEL chemical category	Skin notation

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

## Appropriate engineering controls:

Ensure good ventilation of the work station.

## 8.2.2. Personal protection equipment

## Personal protective equipment:

Avoid all unnecessary exposure.

## Personal protective equipment symbol(s):







#### 8.2.2.1. Eye and face protection

#### Eye protection:

Chemical goggles or safety glasses. Safety glasses

#### 8.2.2.2. Skin protection

#### Skin and body protection:

Wear suitable protective clothing

## Hand protection:

Protective gloves. Wear protective gloves.

#### 8.2.2.3. Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate mask

#### 8.2.2.4. Thermal hazards

No additional information available

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#### 8.2.3. Environmental exposure controls

#### **Environmental exposure controls:**

Avoid release to the environment.

#### Other information:

Do not eat, drink or smoke during use.

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : light yellow. amber. Conforms to standard.

Odour : characteristic. : Not available Odour threshold : Not applicable Melting point : Not available Freezing point : Not available Boiling point Flammability : Not applicable Lower explosion limit : Not available Upper explosion limit : Not available : > 93 °C Flash point : Not available Auto-ignition temperature Decomposition temperature Not available рΗ Not available Viscosity, kinematic Not available Solubility : Not available Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50°C : Not available Density : Not available Relative density · ≈ 0.99 Relative vapour density at 20°C : Not available Particle characteristics : Not applicable

#### 9.2. Other information

## 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

## 10.2. Chemical stability

Stable under normal conditions. Not established.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

## 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

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## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. fume. Carbon monoxide. Carbon dioxide.

## **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Acute toxicity (inhalation)	Not classified	
Amyl cinnamic aldehyde (122-40-7)		
LD50 oral rat	3730 mg/kg (Source: CHEMVIEW)	
LD50 dermal rabbit	> 2000 mg/kg (Source: CHEMVIEW)	
Linalool (78-70-6)		
LD50 oral	2790 mg/kg bodyweight	
Hexyl cinnamic aldehyde (101-86-0)		
LD50 oral rat	3100 mg/kg (Source: NLM_CIP)	
LD50 oral	3100 mg/kg bodyweight	
LD50 dermal rabbit	> 3000 mg/kg (Source: EPA_HPV)	
LC50 Inhalation - Rat	> 5 mg/l/4h	
Benzyl acetate (140-11-4)		
LD50 oral rat	2490 mg/kg (Source: JAPAN_GHS)	
LD50 oral	2490 mg/kg bodyweight	
LD50 dermal rabbit	> 5000 mg/kg (Source: JAPAN_GHS)	
Linalyl acetate (115-95-7)		
LD50 oral rat	14550 mg/kg (Source: EPA_HPV)	
LD50 dermal rabbit	> 5000 mg/kg (Source: ECHA)	
LC50 Inhalation - Rat	> 18.94 mg/l (Exposure time: 8 h Source: ECHA)	
Phenylethyl alcohol (60-12-8)		
LD50 oral rat	1609 mg/kg (Source: EPA_HPV)	
LD50 oral	1610 mg/kg bodyweight	
LD50 dermal rabbit	2535 mg/kg (Source: EPA_HPV)	
LD50 dermal	2500 mg/kg bodyweight	
LC50 Inhalation - Rat	> 4.63 mg/l/4h	
Benzyl salicylate (118-58-1)		
LD50 oral rat	2227 mg/kg (Source: NLM_CIP)	
LD50 oral	2200 mg/kg bodyweight	
LD50 dermal rabbit	> 5000 mg/kg (Source: CHEMVIEW)	
Hydroxy (107-75-5)		
LD50 oral rat	> 5 g/kg (Source: NLM_CIP)	
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)	

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Eugenol (97-53-0)		
LD50 oral rat	1930 mg/kg (Source: NZ_CCID)	
LD50 oral	2500 mg/kg bodyweight	
Geraniol (106-24-1)		
LD50 oral rat	3600 mg/kg (Source: NLM_CIP)	
LD50 oral	3600 mg/kg bodyweight	
LD50 dermal rabbit	> 5 g/kg (Source: NLM_CIP)	
Nerol (106-25-2)		
LD50 oral rat	4500 mg/kg (Source: NLM_CIP)	
LD50 oral	4500 mg/kg bodyweight	
LD50 dermal rabbit	> 5 g/kg (Source: NLM_CIP)	
Methyl anthranilate (134-20-3)		
LD50 oral rat	2910 mg/kg (Source: NLM_CIP)	
LD50 oral	2780 mg/kg bodyweight	
LD50 dermal rabbit	5000 mg/kg (Source: NLM_HSDB)	
tetrahydro-2-isobutyl-4-methylpyran-4-ol, mix	ed isomers (cis and trans) (63500-71-0)	
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)	
Dimethylbenzyl carbinyl butyrate(DMBCB) (10	0094-34-5)	
LD50 oral rat	> 5 g/kg (Source: NLM_CIP)	
Terpineol (8000-41-7)		
LD50 oral rat	2900 mg/kg (Source: IUCLID)	
LD50 oral	4300 mg/kg bodyweight	
LD50 dermal rabbit	> 3000 mg/kg (Source: IUCLID)	
Patchouli oil (8014-09-3)		
LD50 oral rat	> 5 g/kg (Source: NLM_CIP)	
2(3H)-Furanone, 5-heptyldihydro- (104-67-6)		
LD50 oral rat	18500 mg/kg (Source: NLM_CIP)	
LD50 dermal rat	> 2000 mg/kg (Source: ECHA)	
Methyl isoeugenol (93-16-3)		
LD50 oral rat	2500 mg/kg (Source: NLM_CIP)	
LD50 oral	2500 mg/kg bodyweight	
Cinnamic alcohol (104-54-1)		
LD50 oral	2000 mg/kg bodyweight	
LD50 dermal rabbit	> 5000 mg/kg (Source: ECHA_API)	
Cyclamal (103-95-7)		
LD50 oral rat	3810 mg/kg (Source: NLM_CIP)	
LD50 oral	3810 mg/kg bodyweight	
LD50 dermal rat	> 5000 mg/kg (Source: ECHA_API)	

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benzyl alcohol (100-51-6)		
LD50 oral rat	1230 mg/kg (Source: NLM_CIP)	
LD50 oral	1620 mg/kg bodyweight	
LD50 dermal	2500 mg/kg bodyweight	
Citrus medica limonum (Lemon) peel oil (800	8-56-8)	
LD50 oral rat	2840 mg/kg (Source: NLM_CIP)	
ACETYL HEXAMETHYL TETRALIN (21145-77-	7)	
LD50 oral rat	570 mg/kg (Source: NLM_CIP)	
LD50 oral	1000 mg/kg bodyweight	
LD50 dermal rabbit	> 5 g/kg (Source: NLM_HSDB)	
Heliotropine (120-57-0)		
LD50 oral rat	2700 mg/kg (Source: NLM_CIP)	
LD50 oral	2700 mg/kg bodyweight	
LD50 dermal rat	> 5000 mg/kg (Source: ECHA_API)	
Ylang ylang oil III (8006-81-3)		
LD50 oral rat	> 5 g/kg (Source: NLM_CIP)	
Clove Leaf Oil (8000-34-8)		
LD50 oral rat	1370 mg/kg (Source: NZ_CCID)	
LD50 oral	2650 mg/kg bodyweight	
LD50 dermal rabbit	1200 mg/kg (Source: NLM_CIP)	
LD50 dermal	2500 mg/kg bodyweight	
Triplal (Vertocitral) (68039-49-6)		
LD50 oral	3900 mg/kg bodyweight	
Indole crystals (120-72-9)		
LD50 oral rat	1 g/kg (Source: NLM_CIP)	
LD50 oral	1000 mg/kg bodyweight	
LD50 dermal rabbit	790 mg/kg (Source: NZ CCID)	
LD50 dermal	790 mg/kg bodyweight	
	Causes skin irritation.	
Serious eye damage/irritation :	Causes serious eye irritation.	
Respiratory or skin sensitisation :	May cause an allergic skin reaction.	
Germ cell mutagenicity :	Not classified Not classified	
Carcinogenicity :  Benzyl acetate (140-11-4)	Not classified	
IARC group	3 - Not classifiable	
Eugenol (97-53-0)		
IARC group	3 - Not classifiable	
Reproductive toxicity : STOT-single exposure :	Not classified Not classified	
	Not classified  Not classified	
	Not classified	

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Heliotropine (120-57-0)	
Viscosity, kinematic	Not applicable

## 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

No additional information available

#### 11.2.2. Other information

Potential adverse human health effects and

: Based on available data, the classification criteria are not met

symptoms

## **SECTION 12: Ecological information**

## 12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term : Not classified

Hazardous to the aquatic environment, long-term : Harmful to aquatic life with long lasting effects.

(chronic)	
Linalool (78-70-6)	
EC50 96h - Algae [1]	88.3 mg/l (Species: Desmodesmus subspicatus)
Linalyl acetate (115-95-7)	
LC50 - Fish [1]	11 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [flow-through] Source: ECHA)
Phenylethyl alcohol (60-12-8)	
EC50 - Crustacea [1]	287.17 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 72h - Algae [1]	490 mg/l (Species: Desmodesmus subspicatus)
Benzyl salicylate (118-58-1)	
LC50 - Fish [1]	1.03 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)
Eugenol (97-53-0)	
LC50 - Fish [1]	13 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)
Geraniol (106-24-1)	
LC50 - Fish [1]	22 mg/l (Exposure time: 96 h - Species: Danio rerio [static] Source: ECHA)
Nerol (106-25-2)	
LC50 - Fish [1]	20.3 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)
2(3H)-Furanone, 5-heptyldihydro- (104-67-6)	
LC50 - Fish [1]	569 mg/l 96 h
EC50 - Crustacea [1]	5.85 mg/l 48 h
EC50 - Other aquatic organisms [1]	5.94 mg/l 72 h
benzyl alcohol (100-51-6)	
LC50 - Fish [1]	460 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
LC50 - Fish [2]	10 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)
EC50 - Crustacea [1]	23 mg/l (Exposure time: 48 h - Species: water flea)

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Heliotropine (120-57-0)	
LC50 - Fish [1]	2.5 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static] Source: ECHA)
12.2. Persistence and degradability	
TUBEROSE #EU38840F	
Persistence and degradability	Not established.
Amyl cinnamic aldehyde (122-40-7)	
Persistence and degradability	Rapidly degradable
Linalool (78-70-6)	
Persistence and degradability	Rapidly degradable
Hexyl cinnamic aldehyde (101-86-0)	
Persistence and degradability	Rapidly degradable
Benzyl acetate (140-11-4)	
Persistence and degradability	Rapidly degradable
Linalyl acetate (115-95-7)	
Persistence and degradability	Rapidly degradable
Phenylethyl alcohol (60-12-8)	
Persistence and degradability	Rapidly degradable
Benzyl salicylate (118-58-1)	
Persistence and degradability	Rapidly degradable
Hydroxy (107-75-5)	
Persistence and degradability	Rapidly degradable
Eugenol (97-53-0)	
Persistence and degradability	Rapidly degradable
Geraniol (106-24-1)	
Persistence and degradability	Rapidly degradable
Nerol (106-25-2)	
Persistence and degradability	Rapidly degradable
Methyl anthranilate (134-20-3)	
Persistence and degradability	Rapidly degradable
tetrahydro-2-isobutyl-4-methylpyran-4-ol, mix	ed isomers (cis and trans) (63500-71-0)
Persistence and degradability	Rapidly degradable
Dimethylbenzyl carbinyl butyrate(DMBCB) (10	0094-34-5)
Persistence and degradability	Rapidly degradable
Terpineol (8000-41-7)	
Persistence and degradability	Rapidly degradable

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Patchouli oil (8014-09-3)	
Persistence and degradability	Rapidly degradable
2(3H)-Furanone, 5-heptyldihydro- (104-67-6)	
Persistence and degradability	Rapidly degradable
Methyl isoeugenol (93-16-3)	
Persistence and degradability	Rapidly degradable
Cinnamic alcohol (104-54-1)	
Persistence and degradability	Rapidly degradable
Cyclamal (103-95-7)	
Persistence and degradability	Rapidly degradable
benzyl alcohol (100-51-6)	
Persistence and degradability	Rapidly degradable
Citrus medica limonum (Lemon) peel oil (800	8-56-8)
Persistence and degradability	Rapidly degradable
ACETYL HEXAMETHYL TETRALIN (21145-77-	7)
Persistence and degradability	Rapidly degradable
Heliotropine (120-57-0)	
Persistence and degradability	Rapidly degradable
Ylang ylang oil III (8006-81-3)	
Persistence and degradability	Rapidly degradable
Clove Leaf Oil (8000-34-8)	
Persistence and degradability	Rapidly degradable
Triplal (Vertocitral) (68039-49-6)	
Persistence and degradability	Rapidly degradable
Wintergreen oil (68917-75-9)	
Persistence and degradability	Rapidly degradable
Indole crystals (120-72-9)	
Indole crystals (120-72-9)  Persistence and degradability	Rapidly degradable
· · · · · · · · · · · · · · · · · · ·	Rapidly degradable
Persistence and degradability	Rapidly degradable
Persistence and degradability  12.3. Bioaccumulative potential	Rapidly degradable  Not established.
Persistence and degradability  12.3. Bioaccumulative potential  TUBEROSE #EU38840F	
Persistence and degradability  12.3. Bioaccumulative potential  TUBEROSE #EU38840F  Bioaccumulative potential	
Persistence and degradability  12.3. Bioaccumulative potential  TUBEROSE #EU38840F  Bioaccumulative potential  Amyl cinnamic aldehyde (122-40-7)	Not established.
Persistence and degradability  12.3. Bioaccumulative potential  TUBEROSE #EU38840F  Bioaccumulative potential  Amyl cinnamic aldehyde (122-40-7)  Partition coefficient n-octanol/water (Log Pow)	Not established.

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Linalyl acetate (115-95-7)			
Partition coefficient n-octanol/water (Log Pow)	3.9 (at 25 °C)		
Phenylethyl alcohol (60-12-8)			
Partition coefficient n-octanol/water (Log Pow)	1.36 (at 20 °C (at pH 7)		
Benzyl salicylate (118-58-1)			
Partition coefficient n-octanol/water (Log Pow)	4		
Hydroxy (107-75-5)			
Partition coefficient n-octanol/water (Log Pow)	1.68 (at 25 °C)		
Eugenol (97-53-0)			
Partition coefficient n-octanol/water (Log Pow)	1.83 (at 30 °C (at pH 5.5)		
Geraniol (106-24-1)			
Partition coefficient n-octanol/water (Log Pow)	2.6 (at 25 °C)		
Nerol (106-25-2)			
Partition coefficient n-octanol/water (Log Pow)	2.76 (at 30 °C (at pH 6.5)		
Methyl anthranilate (134-20-3)			
Partition coefficient n-octanol/water (Log Pow)	2.17 (at 22 °C)		
tetrahydro-2-isobutyl-4-methylpyran-4-ol, mix	ed isomers (cis and trans) (63500-71-0)		
Partition coefficient n-octanol/water (Log Pow)	1.65 (at 23 °C (at pH >6.09-<6.74)		
Dimethylbenzyl carbinyl butyrate(DMBCB) (10	0094-34-5)		
Partition coefficient n-octanol/water (Log Pow)	4.7 (at 25 °C)		
2(3H)-Furanone, 5-heptyldihydro- (104-67-6)			
Partition coefficient n-octanol/water (Log Pow)	3.6 (at 25 °C)		
Cinnamic alcohol (104-54-1)			
Partition coefficient n-octanol/water (Log Pow)	1.636 (at 27 °C (at pH 3.52)		
Cyclamal (103-95-7)			
Partition coefficient n-octanol/water (Log Pow)	3.4 (at 35 °C)		
benzyl alcohol (100-51-6)			
Partition coefficient n-octanol/water (Log Pow)	1.05		
ACETYL HEXAMETHYL TETRALIN (21145-77-7)			
Partition coefficient n-octanol/water (Log Pow)	5.7 (at 24 °C)		
Heliotropine (120-57-0)			
Partition coefficient n-octanol/water (Log Pow)	1.2 (at 35 °C)		

## 12.4. Mobility in soil

No additional information available

## 12.5. Results of PBT and vPvB assessment

No additional information available

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## 12.6. Endocrine disrupting properties

No additional information available

## 12.7. Other adverse effects

Additional information : Avoid release to the environment.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Waste treatment methods

Product/Packaging disposal recommendations

**Ecological information** 

HP Code

- : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- : Dispose in a safe manner in accordance with local/national regulations.
- : Avoid release to the environment.
- : HP4 "Irritant skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.

HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
14.2. UN proper shippin	g name			
Not regulated	Not regulated Not regulated Not regulated		Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated Not regulated Not regulated			Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental haz	zards			
Not regulated	Not regulated Not regulated Not regulated Not regulated		Not regulated	
No supplementary information available				

#### 14.6. Special precautions for user

## Overland transport

Not regulated

## Transport by sea

Not regulated

#### Air transport

Not regulated

#### **Inland waterway transport**

Not regulated

## Rail transport

Not regulated

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## 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## **SECTION 15: Regulatory information**

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

## 15.1.1. EU-Regulations

## **REACH Annex XVII (Restriction List)**

EU restriction list (F	EU restriction list (REACH Annex XVII)			
Reference code	Applicable on	Entry title or description		
3(a)	Citrus medica limonum (Lemon) peel oil	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F		
3(b)	TUBEROSE #EU38840F; Amyl cinnamic aldehyde; Linalool; Hexyl cinnamic aldehyde; Linalyl acetate ; Phenylethyl alcohol; Benzyl salicylate; Hydroxy; Eugenol; Geraniol; Nerol; Methyl anthranilate; tetrahydro- 2-isobutyl-4-methylpyran- 4-ol, mixed isomers (cis and trans); Dimethylbenzyl carbinyl butyrate(DMBCB); Terpineol; Patchouli oil; Methyl isoeugenol; Cyclamal; benzyl alcohol ; Citrus medica limonum (Lemon) peel oil; Ylang ylang oil III; Clove Leaf Oil; Triplal (Vertocitral); Wintergreen oil; Indole crystals	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10		
3(c)	TUBEROSE #EU38840F; Amyl cinnamic aldehyde; Hexyl cinnamic aldehyde; Benzyl acetate; Benzyl salicylate; Dimethylbenzyl carbinyl butyrate(DMBCB); Patchouli oil; 2(3H)- Furanone, 5- heptyldihydro-; Cyclamal; Citrus medica limonum (Lemon) peel oil; Ylang ylang oil III; Triplal (Vertocitral); Wintergreen oil	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1		

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EU restriction list (REACH Annex XVII)			
Reference code	Applicable on	Entry title or description	
40.	Citrus medica limonum (Lemon) peel oil	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	

#### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

#### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

#### **Dual-Use Regulation (428/2009)**

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

#### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### **Drug Precursors Regulation (273/2004)**

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

Name	CN designation	CAS-No.	CN code	Category, Subcategory	Threshold	Annex
Piperonal		120-57-0	2932 93 00	Category 1		Annex I

#### 15.1.2. National regulations

#### Germany

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

**Netherlands** 

ABM category : A(2) - toxic for aquatic organisms, may have longterm hazardous effects in aquatic

environment

SZW-lijst van kankerverwekkende stoffen

Terpineol, Lemon oil , Triplal (Vertocitral) are listed SZW-lijst van mutagene stoffen Terpineol, Lemon oil , Triplal (Vertocitral) are listed

SZW-lijst van reprotoxische stoffen - Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen -: None of the components are listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen - Ontwikkeling : None of the components are listed

**Denmark** 

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

**Danish National Regulations** Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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## **SECTION 16: Other information**

Other information : None.

Full text of H- and EUI	Full text of H- and EUH-statements:			
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3			
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4			
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4			
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1			
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1			
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2			
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3			
Asp. Tox. 1	Aspiration hazard, Category 1			
Eye Dam. 1	Serious eye damage/eye irritation, Category 1			
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2			
Flam. Liq. 3	Flammable liquids, Category 3			
H226	Flammable liquid and vapour.			
H302	Harmful if swallowed.			
H304	May be fatal if swallowed and enters airways.			
H311	Toxic in contact with skin.			
H315	Causes skin irritation.			
H317	May cause an allergic skin reaction.			
H318	Causes serious eye damage.			
H319	Causes serious eye irritation.			
H332	Harmful if inhaled.			
H361	Suspected of damaging fertility or the unborn child.			
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.			
H412	Harmful to aquatic life with long lasting effects.			
Repr. 2	Reproductive toxicity, Category 2			
Skin Irrit. 2	Skin corrosion/irritation, Category 2			
Skin Sens. 1	Skin sensitisation, Category 1			
Skin Sens. 1B	Skin sensitisation, category 1B			
	•			

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.