

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

#### 1.1. Product identifier

Product form	: Mixture
Product name	: Orange #EU22769F
UFI	: YU11-D2H5-H00G-8U5V
Product code	: EU22769F
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](mailto:SDS@frenchcolor.com) - [www.frenchcolor.com](http://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
Aspiration hazard, Category 1	H304
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411
Full text of H- and EUH-statements: see section 16	

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

Causes skin irritation. Causes serious eye irritation. May be fatal if swallowed and enters airways. Toxic 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)	: Danger
Contains	: Cinnamic aldehyde; Citronellol Pure; Linalool; Benzyl salicylate; Eugenol; UNDECYLENAL; Orange oil ; Lemongrass oil ; Litsea cubeba oil
Hazard statements (CLP)	: H304 - May be fatal if swallowed and enters airways. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: 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. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Extra phrases	: For professional users only.

### 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$  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 is 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]
Orange oil	CAS-No.: 8008-57-9 EC-No.: 232-433-8 REACH-no: 01-2119493353-35	8.695 – 17.39	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Cinnamic aldehyde	CAS-No.: 104-55-2 EC-No.: 203-213-9 REACH-no: 01-2119935242-45	5.22 – 10.44	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Ethylene brassylate	CAS-No.: 105-95-3 EC-No.: 203-347-8 REACH-no: 01-2119976314-33	2.175 – 4.35	Aquatic Chronic 2, H411
Linalool	CAS-No.: 78-70-6 EC-No.: 201-134-4 EC Index-No.: 603-235-00-2 REACH-no: 01-2119474016-42	1.565 – 3.13	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Aldehyde C-10	CAS-No.: 112-31-2 EC-No.: 203-957-4	1.52 – 3.04	Eye Irrit. 2, H319 Aquatic Chronic 3, H412

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Benzyl salicylate	CAS-No.: 118-58-1 EC-No.: 204-262-9 EC Index-No.: 607-754-00-5 REACH-no: 01-2119969442-31	1.085 – 2.17	Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Amyl salicylate	CAS-No.: 2050-08-0 EC-No.: 218-080-2 REACH-no: 01-2119969444-27	1.085 – 2.17	Acute Tox. 4 (Oral), H302 Aquatic Chronic 1, H410
Eugenol	CAS-No.: 97-53-0 EC-No.: 202-589-1 REACH-no: 01-2119971802-33	0.65 – 1.3	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Verdox	CAS-No.: 88-41-5 EC-No.: 201-828-7 REACH-no: 01-2119970713-33	0.545 – 1.09	Aquatic Chronic 2, H411
Neroline Crystals	CAS-No.: 93-18-5 EC-No.: 202-226-7	0.545 – 1.09	Aquatic Chronic 2, H411 Skin Irrit. 2, H315
decyl alcohol substance with national workplace exposure limit(s) (BG, DE, LT, LV, RO, CH)	CAS-No.: 112-30-1 EC-No.: 203-956-9	0.215 – 0.43	Aquatic Chronic 3, H412
Lemongrass oil	CAS-No.: 8007-02-1 EC-No.: 616-903-3	0.215 – 0.43	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
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	0.175 – 0.35	Aquatic Chronic 3, H412
UNDECYLENAL	CAS-No.: 112-45-8 EC-No.: 203-973-1 REACH-no: 01-2119990746-20	0.175 – 0.35	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Citronellol Pure	CAS-No.: 106-22-9 EC-No.: 203-375-0 REACH-no: 01-2119453995-23	0.13 – 0.26	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Litsea cubeba oil	CAS-No.: 68855-99-2 EC-No.: 290-018-7	0.13 – 0.26	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Alcohol C-8 substance with national workplace exposure limit(s) (BG, DE, LT, LV, RO, SI, CH)	CAS-No.: 111-87-5 EC-No.: 203-917-6	0 – 0.09	Eye Irrit. 2, H319 Aquatic Chronic 3, H412

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

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: 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 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	: Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Risk of lung oedema.

#### 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	: Water spray. Dry powder. Foam. Carbon dioxide.
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#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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#### 5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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### 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. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.
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##### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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#### 6.2. Environmental precautions

Avoid release to the environment.

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

#### 6.4. Reference to other sections

For further information refer to section 13.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. 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 : Store locked up. Store in a well-ventilated place. Keep cool.
- 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

Alcohol C-8 (111-87-5)	
<b>Bulgaria - Occupational Exposure Limits</b>	
OEL TWA	10 mg/m <sup>3</sup>
<b>Germany - Occupational Exposure Limits (TRGS 900)</b>	
AGW (OEL TWA) [1]	54 mg/m <sup>3</sup> (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed (long-chain Alcohols))
AGW (OEL TWA) [2]	10 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed (long-chain Alcohols))
<b>Latvia - Occupational Exposure Limits</b>	
OEL TWA	10 mg/m <sup>3</sup> (Octanol)
<b>Lithuania - Occupational Exposure Limits</b>	
IPRV (OEL TWA)	10 mg/m <sup>3</sup>
<b>Romania - Occupational Exposure Limits</b>	
OEL TWA	150 mg/m <sup>3</sup>
OEL TWA [ppm]	28 ppm
OEL STEL	250 mg/m <sup>3</sup>
OEL STEL [ppm]	47 ppm
OEL chemical category	Skin notation
<b>Slovenia - Occupational Exposure Limits</b>	
OEL TWA	106 mg/m <sup>3</sup>
OEL TWA [ppm]	20 ppm
OEL STEL	106 mg/m <sup>3</sup>
OEL STEL [ppm]	20 ppm

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<b>Alcohol C-8 (111-87-5)</b>	
<b>Switzerland - Occupational Exposure Limits</b>	
MAK (OEL TWA) [1]	106 mg/m <sup>3</sup>
MAK (OEL TWA) [2]	20 ppm
KZGW (OEL STEL)	106 mg/m <sup>3</sup>
KZGW (OEL STEL) [ppm]	20 ppm
<b>decyl alcohol (112-30-1)</b>	
<b>Bulgaria - Occupational Exposure Limits</b>	
OEL TWA	10 mg/m <sup>3</sup>
<b>Germany - Occupational Exposure Limits (TRGS 900)</b>	
AGW (OEL TWA) [1]	66 mg/m <sup>3</sup> (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
AGW (OEL TWA) [2]	10 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
<b>Latvia - Occupational Exposure Limits</b>	
OEL TWA	10 mg/m <sup>3</sup>
<b>Lithuania - Occupational Exposure Limits</b>	
IPRV (OEL TWA)	10 mg/m <sup>3</sup>
<b>Romania - Occupational Exposure Limits</b>	
OEL TWA	100 mg/m <sup>3</sup>
OEL TWA [ppm]	15 ppm
OEL STEL	200 mg/m <sup>3</sup>
OEL STEL [ppm]	30 ppm
<b>Switzerland - Occupational Exposure Limits</b>	
MAK (OEL TWA) [1]	66 mg/m <sup>3</sup> (aerosol, vapour)
MAK (OEL TWA) [2]	10 ppm (aerosol, vapour)
KZGW (OEL STEL)	66 mg/m <sup>3</sup> (aerosol, vapour)
KZGW (OEL STEL) [ppm]	10 ppm (aerosol, vapour)
<b>Benzyl acetate (140-11-4)</b>	
<b>Belgium - Occupational Exposure Limits</b>	
OEL TWA	62 mg/m <sup>3</sup>
OEL TWA [ppm]	10 ppm
<b>Denmark - Occupational Exposure Limits</b>	
OEL TWA [1]	61 mg/m <sup>3</sup>
OEL TWA [2]	10 ppm
<b>Ireland - Occupational Exposure Limits</b>	
OEL TWA [2]	10 ppm
OEL STEL [ppm]	30 ppm (calculated)
<b>Latvia - Occupational Exposure Limits</b>	
OEL TWA	5 mg/m <sup>3</sup>

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Benzyl acetate (140-11-4)	
<b>Lithuania - Occupational Exposure Limits</b>	
IPRV (OEL TWA)	5 mg/m <sup>3</sup>
<b>Portugal - Occupational Exposure Limits</b>	
OEL TWA [ppm]	10 ppm
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen
<b>Romania - Occupational Exposure Limits</b>	
OEL TWA	50 mg/m <sup>3</sup>
OEL TWA [ppm]	8 ppm
OEL STEL	80 mg/m <sup>3</sup>
OEL STEL [ppm]	13 ppm
<b>Spain - Occupational Exposure Limits</b>	
VLA-ED (OEL TWA) [1]	62 mg/m <sup>3</sup>
VLA-ED (OEL TWA) [2]	10 ppm
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA [ppm]	10 ppm
ACGIH chemical category	Not Classifiable as a Human Carcinogen

### 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 symbol(s):



#### 8.2.2.1. Eye and face protection

##### Eye protection:

Safety glasses

#### 8.2.2.2. Skin protection

##### Skin and body protection:

Wear suitable protective clothing

##### Hand protection:

Protective gloves

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### 8.2.2.3. Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: light yellow. amber.
Odour	: characteristic. characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 75 °C (closed cup) ASTM D7094
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 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	: 0.93
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.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.



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### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

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

## 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

#### Alcohol C-8 (111-87-5)

LD50 oral rat	> 3200 mg/kg
LD50 dermal rabbit	> 5 g/kg
LD50 dermal	2500 mg/kg bodyweight

#### Cinnamic aldehyde (104-55-2)

LD50 oral rat	2220 mg/kg
LD50 oral	2200 mg/kg bodyweight
LD50 dermal rabbit	1260 mg/kg
LD50 dermal	1100 mg/kg bodyweight

#### decyl alcohol (112-30-1)

LD50 oral rat	4720 mg/kg
LD50 dermal rabbit	3560 mg/kg

#### Benzyl acetate (140-11-4)

LD50 oral rat	2490 mg/kg
LD50 oral	2490 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg

#### Citronellol Pure (106-22-9)

LD50 oral rat	3450 mg/kg
LD50 oral	3450 mg/kg bodyweight
LD50 dermal rabbit	2650 mg/kg
LD50 dermal	2650 mg/kg bodyweight

#### Aldehyde C-10 (112-31-2)

LD50 oral rat	3730 mg/kg
LD50 dermal rabbit	5040 mg/kg

#### Linalool (78-70-6)

LD50 oral	2790 mg/kg bodyweight
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<b>Ethylene brassylate (105-95-3)</b>	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
<b>Benzyl salicylate (118-58-1)</b>	
LD50 oral rat	2227 mg/kg
LD50 oral	2200 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg
<b>Amyl salicylate (2050-08-0)</b>	
LD50 oral rat	4100 mg/kg
LD50 oral	2000 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg
<b>Verdox (88-41-5)</b>	
LD50 oral rat	4600 mg/kg
LD50 oral	4600 mg/kg bodyweight
<b>Neroline Crystals (93-18-5)</b>	
LD50 oral rat	3110 mg/kg
LD50 oral	3110 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg
<b>Eugenol (97-53-0)</b>	
LD50 oral rat	1930 mg/kg
LD50 oral	2500 mg/kg bodyweight
<b>UNDECYLENAL (112-45-8)</b>	
LD50 oral rat	> 5 g/kg
LD50 dermal rabbit	> 5000 mg/kg
<b>Orange oil (8008-57-9)</b>	
LD50 oral rat	4400 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
<b>Lemongrass oil (8007-02-1)</b>	
LD50 oral rat	> 5 g/kg
LD50 dermal	3127 mg/kg bodyweight
<b>Litsea cubeba oil (68855-99-2)</b>	
LD50 oral rat	> 5 g/kg
LD50 dermal	4800 mg/kg bodyweight
Skin corrosion/irritation	: 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
Carcinogenicity	: Not classified
<b>Benzyl acetate (140-11-4)</b>	
IARC group	3 - Not classifiable

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### Eugenol (97-53-0)

IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.

### Orange oil (8008-57-9)

Hydrocarbon	Yes
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### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.

### Alcohol C-8 (111-87-5)

LC50 - Fish [1]	11.4 – 12.9 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 - Fish [2]	17.68 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

### decyl alcohol (112-30-1)

LC50 - Fish [1]	2.2 – 2.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 - Fish [2]	4.12 – 6.2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 - Crustacea [1]	3 mg/l (Exposure time: 48 h - Species: Daphnia magna)

### Aldehyde C-10 (112-31-2)

LC50 - Fish [1]	1.45 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
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### Linalool (78-70-6)

EC50 96h - Algae [1]	88.3 mg/l (Species: Desmodesmus subspicatus)
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### Benzyl salicylate (118-58-1)

LC50 - Fish [1]	1.03 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])
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### Eugenol (97-53-0)

LC50 - Fish [1]	13 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])
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### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

### Alcohol C-8 (111-87-5)

Partition coefficient n-octanol/water (Log Pow)	3.5 (at 23 °C (at pH 5.7))
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### Cinnamic aldehyde (104-55-2)

Partition coefficient n-octanol/water (Log Pow)	2.1065 (at 25 °C)
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decyl alcohol (112-30-1)	
Partition coefficient n-octanol/water (Log Pow)	4.5 (at 25 °C (at pH 6)
Benzyl acetate (140-11-4)	
Partition coefficient n-octanol/water (Log Pow)	1.96 (at 25 °C (at pH 7)
Citronellol Pure (106-22-9)	
Partition coefficient n-octanol/water (Log Pow)	3.41 (at 25 °C)
Aldehyde C-10 (112-31-2)	
Partition coefficient n-octanol/water (Log Pow)	3.8 (at 35 °C)
Ethylene brassylate (105-95-3)	
Partition coefficient n-octanol/water (Log Pow)	4.3 (at 25 °C (at pH 6.4-7)
Benzyl salicylate (118-58-1)	
Partition coefficient n-octanol/water (Log Pow)	4
Amyl salicylate (2050-08-0)	
BCF - Fish [1]	(1170 dimensionless (whole body w.w.)
Partition coefficient n-octanol/water (Log Pow)	4.5 (at 30 °C)
Neroline Crystals (93-18-5)	
Partition coefficient n-octanol/water (Log Pow)	3.747 (at 25 °C (at pH 6.23)
Eugenol (97-53-0)	
Partition coefficient n-octanol/water (Log Pow)	1.83 (at 30 °C (at pH 5.5)
UNDECYLENAL (112-45-8)	
Partition coefficient n-octanol/water (Log Pow)	4.672 (at 25 °C)

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

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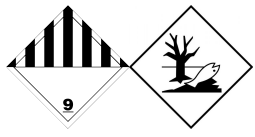




according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

HP Code

- : HP3 - "Flammable:"  
– flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;  
– flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;  
– flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;  
– flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;  
– water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;  
– other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.
- HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.
- 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
<b>14.1. UN number or ID number</b>				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
<b>14.2. UN proper shipping name</b>				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Amyl salicylate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Amyl salicylate)	Environmentally hazardous substance, liquid, n.o.s. (Amyl salicylate)	(Amyl salicylate)	(Amyl salicylate)
<b>Transport document description</b>				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Amyl salicylate), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Amyl salicylate), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Amyl salicylate), 9, III	UN 3082 (Amyl salicylate)	UN 3082 (Amyl salicylate)
<b>14.3. Transport hazard class(es)</b>				
9	9	9	Not applicable	Not applicable
				
<b>14.4. Packing group</b>				
III	III	III	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes

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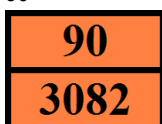
according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	:



Tunnel restriction code (ADR)	: -
EAC code	: •3Z

#### Transport by sea

Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

#### Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158, A197
ERG code (IATA)	: 9L

#### Inland waterway transport

No data available

#### Rail transport

No data available

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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 (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(a)	Orange 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)	Orange #EU22769F ; Alcohol C-8 ; Cinnamic aldehyde ; Citronellol Pure ; Aldehyde C-10 ; Linalool ; Benzyl salicylate ; Amyl salicylate ; Eugenol ; UNDECYLENAL ; Orange oil ; Lemongrass oil ; Litsea cubeba 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 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)	Orange #EU22769F ; Alcohol C-8 ; Cinnamic aldehyde ; decyl alcohol ; Benzyl acetate ; Aldehyde C-10 ; Ethylene brassylate ; Benzyl salicylate ; Amyl salicylate ; Verdox ; UNDECYLENAL ; Orange oil ; Lemongrass oil ; Litsea cubeba 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
40.	Orange 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)

##### 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)

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### Drug Precursors Regulation (273/2004)

Contains no 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)

#### 15.1.2. National regulations

##### Germany

- Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG).  
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).
- Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).
- List of sensitizing substances (TRGS 907) : Contains sensitizing substances according TRGS 907.
- Hazardous Incident Ordinance (12. BImSchV) : Is not subject of 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 : Orange oil is listed
- SZW-lijst van mutagene stoffen : Orange oil is listed
- SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed
- SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed
- SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

##### Denmark

- Class for fire hazard : Class III-1
- Store unit : 50 liter
- Classification remarks : Flammable according to the Danish Ministry of Justice; 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

### SECTION 16: Other information

#### Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), 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.
H312	Harmful in contact with skin.



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### Full text of H- and EUH-statements:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
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.