# Birch Leaf Givco 166

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 7/3/2024 Revision date: 6/17/2025 Supersedes version of: 7/3/2024 Version: 2.0

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

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Mixture |
| Product name | : | Birch Leaf Givco 166 |
| UFI | : | Q664-AN3E-F42T-HJJV |
| Product code | : | 23127 |
| Product group | : | Trade product |

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

#### Relevant identified uses

Intended for general public

| | | |
|---|---|---|
| Main use category | : | Consumer use,Professional use |
| Use of the substance/mixture | : | Fragrance raw material |

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

De Hekserij
Spoorstraat 57
8271 RG IJsselmuiden
Nederland
T +31 383 557 927
hekserij@hekserij.nl, www.hekserij.nl

### 1.4. Emergency telephone number

No additional information available

## 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 1 | H318 |
| Skin sensitisation, Category 1 | H317 |
| 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. May cause an allergic skin reaction. Causes serious eye damage. Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05 GHS07 GHS09

| | | |
|---|---|---|
| Signal word (CLP) | : | Danger |
| Contains | : | Geraniol; Eugenol; Bergamot acetoacetate; Guaiacwood acetate; Citral; Linalool; 2,6,10-trimethylundec-9-enal; cis-3-Hexenyl benzoate; d-Limonene; Benzyl alcohol; Myrcenyl acetate; 2,4-dimethylcyclohex-3-ene-1-carbaldehyde; Citronellal; beta-Pinene; delta-3-Carene; 2-Methoxy-p-cresol; Isoeugenol; Nerol; Eucalyptus oil; alpha-Pinene; Geranyl acetate; Citrus aurantium peel oil |
| Hazard statements (CLP) | : | H315 - Causes skin irritation.<br>H317 - May cause an allergic skin reaction. |

H318 - Causes serious eye damage.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P102 - Keep out of reach of children.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a doctor, a POISON CENTER.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P391 - Collect spillage.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Extra phrases : Fragrance allergens (Cosmetics):
LINALYL ACETATE
FARNESOL
BETA-CARYOPHYLLENE
ISOEUGENOL
TERPINOLENE
ISOEUGENYL ACETATE
ALPHA-TERPINENE
TERPINEOL
DIMETHYLBENZYL CARBINYL ACETATE
GERANYL ACETATE
PINENE
BETA-PINENES
BENZYL ALCOHOL
EUGENOL
GERANIOL
CITRUS AURANTIUM AMARA PEEL
CITRAL
LINALOOL
CITRONELLOL.

### 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

### 3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| Geraniol | CAS-No.: 106-24-1<br>EC-No.: 203-377-1 | 10 - 15 | Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317 |
| Eugenol | CAS-No.: 97-53-0<br>EC-No.: 202-589-1 | 10 - 15 | Acute Tox. 4 (Oral), H302<br>Eye Irrit. 2, H319<br>Skin Sens. 1B, H317 |

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| Bergamot acetoacetate | CAS-No.: 69103-01-1<br>EC-No.: 273-868-3<br>REACH-no: 01-2120260055-65 | 5 – 10 | Skin Sens. 1B, H317<br>Aquatic Chronic 3, H412 |
| Guaiacwood acetate | CAS-No.: 94333-88-7<br>EC-No.: 305-067-2 | 5 – 10 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1B, H317<br>Aquatic Chronic 1, H410 |
| cis-hex-3-en-1-ol | CAS-No.: 928-96-1<br>EC-No.: 213-192-8 | 5 – 10 | Flam. Liq. 3, H226<br>Eye Irrit. 2, H319 |
| 2-phenylethanol | CAS-No.: 60-12-8<br>EC-No.: 200-456-2<br>REACH-no: 01-2119963921-31 | 1 – 5 | Acute Tox. 4 (Oral), H302<br>Eye Irrit. 2, H319 |
| Linalool | CAS-No.: 78-70-6<br>EC-No.: 201-134-4<br>EC Index-No.: 603-235-00-2 | 1 – 5 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1B, H317 |
| Nerol | CAS-No.: 106-25-2<br>EC-No.: 203-378-7 | 1 – 5 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1B, H317 |
| 4-methyl-3-decen-5-ol | CAS-No.: 81782-77-6<br>EC-No.: 279-815-0<br>REACH-no: 01-2119983528-21 | 2.5 – 5 | Aquatic Acute 1, H400<br>Aquatic Chronic 2, H411 |
| 2,6,10-trimethylundec-9-enal | CAS-No.: 141-13-9<br>EC-No.: 205-460-8<br>REACH-no: 01-2120139915-49 | 1 – 2.5 | Skin Sens. 1B, H317<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |
| Vernaldehyde | CAS-No.: 66327-54-6<br>EC-No.: 266-314-7, 945-920-1<br>REACH-no: 01-2120735782-50 | 1 – 2.5 | Skin Irrit. 2, H315<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |
| cis-3-Hexenyl benzoate | CAS-No.: 25152-85-6<br>EC-No.: 246-669-4 | 1 – 2.5 | Skin Sens. 1B, H317<br>Aquatic Chronic 2, H411 |
| 5-methylheptan-3-one oxime | CAS-No.: 22457-23-4<br>EC-No.: 245-010-8<br>REACH-no: 01-2120747610-59 | 1 – 2.5 | Aquatic Chronic 3, H412 |
| d-Limonene | CAS-No.: 5989-27-5<br>EC-No.: 227-813-5<br>EC Index-No.: 601-096-00-2 | 1 - 5 | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Skin Sens. 1B, H317<br>Asp. Tox. 1, H304<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |
| Citral | CAS-No.: 5392-40-5<br>EC-No.: 226-394-6<br>EC Index-No.: 605-019-00-3<br>REACH-no: 01-2119462829-23 | 1 - 5 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317 |

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| Eucalyptus oil | CAS-No.: 84625-32-1<br>EC-No.: 283-406-2<br>REACH-no: 01-2119978250-37 | 1 - 5 | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>Repr. 2, H361<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411 |
| Benzyl alcohol | CAS-No.: 100-51-6<br>EC-No.: 202-859-9<br>EC Index-No.: 603-057-00-5<br>REACH-no: 01-2119492630-38 | 1 - 2.5 | Acute Tox. 4 (Oral), H302<br>Eye Irrit. 2, H319<br>Skin Sens. 1B, H317 |
| Myrcenyl acetate | CAS-No.: 1118-39-4<br>EC-No.: 214-262-0 | 0.25 – 1 | Skin Irrit. 2, H315<br>Skin Sens. 1B, H317<br>Aquatic Chronic 2, H411 |
| 2,4-dimethylcyclohex-3-ene-1-carbaldehyde | CAS-No.: 68039-49-6<br>EC-No.: 268-264-1<br>REACH-no: 01-2119982384-28 | 0.25 – 1 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1B, H317<br>Aquatic Chronic 2, H411 |
| Citronellal | CAS-No.: 106-23-0<br>EC-No.: 203-376-6 | 0.1 – 1 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1B, H317 |
| beta-Pinene | CAS-No.: 127-91-3<br>EC-No.: 204-872-5 | 0.25 – 1 | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Skin Sens. 1B, H317<br>Asp. Tox. 1, H304 |
| 2-Methoxy-p-cresol | CAS-No.: 93-51-6<br>EC-No.: 202-252-9 | 0.1 – 1 | Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1B, H317 |
| delta-3-Carene | CAS-No.: 13466-78-9<br>EC-No.: 236-719-3 | 0.1 – 0.25 | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Skin Sens. 1B, H317<br>Asp. Tox. 1, H304 |
| Isoeugenol | CAS-No.: 97-54-1<br>EC-No.: 202-590-7 | 0 – 0.01 | Acute Tox. 4 (Oral), H302<br>Acute Tox. 4 (Dermal), H312<br>Acute Tox. 4 (Inhalation:dust,mist), H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1A, H317<br>STOT SE 3, H335 |

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 : If you feel unwell, seek medical advice.

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. Call a physician immediately.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.
First-aid measures for first aider : First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : None under normal conditions.

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

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

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : 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

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

#### For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

#### 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".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

### 6.2. Environmental precautions

Avoid release to the environment.

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

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
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.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

| | | |
|---|---|---|
| Additional hazards when processed | : | Not expected to present a significant hazard under anticipated conditions of normal use. |
| 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. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

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

| | | |
|---|---|---|
| Technical measures | : | Keep in a cool, well-ventilated place away from heat. |
| Storage conditions | : | Keep cool. Protect from sunlight. |
| Packaging materials | : | Store always product in container of same material as original container. |

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Appropriate engineering controls

**Appropriate engineering controls:**
Ensure good ventilation of the work station.

#### Personal protection equipment

**Personal protective equipment:**
Wear recommended personal protective equipment.
**Personal protective equipment symbol(s):**

#### Eye and face protection

**Eye protection:**
Safety glasses

#### Skin protection

**Skin and body protection:**
Wear suitable protective clothing

**Hand protection:**
Protective gloves

#### Respiratory protection

**Respiratory protection:**
In case of insufficient ventilation, wear suitable respiratory equipment

#### 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 | : | pale yellow to brown yellow. |
| Odour | : | Not available |
| Odour threshold | : | Not available |
| Melting point | : | Not applicable |
| Freezing point | : | Not available |
| Boiling point | : | Not available |
| Flammability | : | Not available |
| Lower explosion limit | : | Not available |
| Upper explosion limit | : | Not available |
| Flash point | : | 75 °C |
| Auto-ignition temperature | : | Not available |
| Decomposition temperature | : | Not available |
| pH | : | Not available |
| Viscosity, kinematic | : | Not available |
| Solubility | : | Practically insoluble. |
| Partition coefficient n-octanol/water (Log Kow) | : | Not available |
| Vapour pressure | : | 0.3672 hPa Temp.: 20 °C |
| Vapour pressure at 50°C | : | Not available |
| Density | : | 923.33 kg/m³ Temp.: 20 °C |
| Relative density | : | Not available |
| Relative vapour density at 20°C | : | Not available |
| Particle characteristics | : | Not applicable |

### 9.2. Other information

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.

### 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 |

| Birch Leaf Givco 166 | |
|---|---|
| LD50 oral | > 2000 mg/kg |
| **Geraniol (106-24-1)** | |
| LD50 oral rat | 3600 mg/kg bodyweight Animal: rat, 95% CL: 2840 - 4570 |
| LD50 dermal rabbit | > 5000 mg/kg bodyweight Animal: rabbit |
| **Eugenol (97-53-0)** | |
| LD50 oral rat | > 2000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method) |
| LD50 oral | 1500 – 1500 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method) |
| **Bergamot acetoacetate (69103-01-1)** | |
| LD50 oral | > 5000 mg/kg |
| LD50 dermal | > 5000 mg/kg |
| **Guaiacwood acetate (94333-88-7)** | |
| LD50 oral | 10000 mg/kg bodyweight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity) |
| **2-phenylethanol (60-12-8)** | |
| LD50 dermal rabbit | 2535 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 1769 - 3634 |
| LC50 Inhalation - Rat | > 4.63 mg/l air Animal: rat |
| **Citral (5392-40-5)** | |
| LD50 oral rat | ≈ 6800 mg/kg bodyweight Animal: rat |
| LD50 dermal rat | > 2000 mg/kg bodyweight Animal: rat |
| **Linalool (78-70-6)** | |
| LD50 oral rat | 2790 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2440 - 3180 |
| LD50 oral | 3120 mg/kg bodyweight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2620 - 3620 |
| LD50 dermal rabbit | 5610 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 3578 - 8374 |
| **2,6,10-trimethylundec-9-enal (141-13-9)** | |
| LD50 oral rat | > 4250 mg/kg OECD Guideline 401 (Acute Oral Toxicity) |
| LD50 dermal rabbit | > 5000 mg/kg |
| **Vernaldehyde (66327-54-6)** | |
| LD50 dermal rabbit | > 5000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |
| **cis-3-Hexenyl benzoate (25152-85-6)** | |
| LD50 oral rat | > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity) |

| d-Limonene (5989-27-5) | |
|---|---|
| LD50 oral rat | > 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method) |

| Benzyl alcohol (100-51-6) | |
|---|---|
| LD50 oral | 1580 mg/kg bodyweight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1410 - 1770 |
| LD50 dermal rabbit | > 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity) |
| LC50 Inhalation - Rat | > 4.178 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity) |

| Myrcenyl acetate (1118-39-4) | |
|---|---|
| LD50 oral rat | 6300 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 5300 - 7300 |
| LD50 dermal | > 5000 mg/kg |

| Citronellal (106-23-0) | |
|---|---|
| LD50 dermal rat | > 2000 mg/kg bodyweight Animal: rat |
| LD50 dermal rabbit | 2500 – 5000 mg/kg bodyweight Animal: rabbit |

| 2-Methoxy-p-cresol (93-51-6) | |
|---|---|
| LD50 oral | 623 mg/kg |

| Nerol (106-25-2) | |
|---|---|
| LD50 oral rat | 4500 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 3400 - 5600 |
| LD50 dermal rabbit | > 5000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |

| 4-methyl-3-decen-5-ol (81782-77-6) | |
|---|---|
| LD50 oral rat | > 8000 mg/kg |

| cis-hex-3-en-1-ol (928-96-1) | |
|---|---|
| LD50 oral rat | 4615 mg/kg bodyweight Animal: rat, 95% CL: 4045 - 6265 |
| LC50 Inhalation - Rat | > 4.99 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method) |

| Eucalyptus oil (84625-32-1) | |
|---|---|
| LD50 dermal rabbit | > 5000 mg/kg bodyweight Animal: rabbit |

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

| Geraniol (106-24-1) | |
|---|---|
| NOAEL (chronic, oral, animal/male, 2 years) | 60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |

| Citral (5392-40-5) | |
|---|---|
| NOAEL (chronic, oral, animal/male, 2 years) | 60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |

| Citronellal (106-23-0) | |
|---|---|
| NOAEL (chronic, oral, animal/male, 2 years) | 60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |

Reproductive toxicity : Not classified

| 2,6,10-trimethylundec-9-enal (141-13-9) | |
|---|---|
| NOAEL (animal/female, F0/P) | ≥ 300 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other: |
| NOAEL (animal/female, F1) | > 300 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other: |

| Eucalyptus oil (84625-32-1) | |
|---|---|
| NOAEL (animal/male, F0/P) | 1000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) |
| NOAEL (animal/female, F0/P) | 300 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) |

STOT-single exposure : Not classified

| Isoeugenol (97-54-1) | |
|---|---|
| STOT-single exposure | May cause respiratory irritation. |

STOT-repeated exposure : Not classified

| Geraniol (106-24-1) | |
|---|---|
| NOAEL (dermal, rat/rabbit, 90 days) | 300 mg/kg bodyweight Animal: rat, Guideline: other:, Guideline: other: |

| Eugenol (97-53-0) | |
|---|---|
| NOAEL (subchronic, oral, animal/male, 90 days) | ≥ 900 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: other: |
| NOAEL (subchronic, oral, animal/female, 90 days) | 450 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: other: |

| 2-phenylethanol (60-12-8) | |
|---|---|
| NOAEL (dermal, rat/rabbit, 90 days) | 510 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study) |

| Citral (5392-40-5) | |
|---|---|
| LOAEC (inhalation, rat, gas, 90 days) | 68 ppm Animal: rat, Animal sex: female |
| NOAEL (oral, rat, 90 days) | 100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |
| NOAEC (inhalation, rat, gas, 90 days) | 34 ppm Animal: rat, Animal sex: female |
| NOAEL (subchronic, oral, animal/male, 90 days) | 60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |

| Linalool (78-70-6) | |
|---|---|
| NOAEL (dermal, rat/rabbit, 90 days) | 250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study) |

| 2,6,10-trimethylundec-9-enal (141-13-9) | |
|---|---|
| NOAEL (oral, rat, 90 days) | ≥ 335 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other: |

| Benzyl alcohol (100-51-6) | |
|---|---|
| NOAEL (oral, rat, 90 days) | 400 mg/kg bodyweight Animal: rat, Guideline: other: |

| Citronellal (106-23-0) | |
|---|---|
| LOAEC (inhalation, rat, gas, 90 days) | 68 ppm Animal: rat, Animal sex: female |

| Citronellal (106-23-0) | |
|---|---|
| NOAEL (oral, rat, 90 days) | 100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |
| NOAEC (inhalation, rat, gas, 90 days) | 34 ppm Animal: rat, Animal sex: female |
| NOAEL (subchronic, oral, animal/male, 90 days) | 60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |

| cis-hex-3-en-1-ol (928-96-1) | |
|---|---|
| NOAEL (oral, rat, 90 days) | 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) |

| 5-methylheptan-3-one oxime (22457-23-4) | |
|---|---|
| NOAEL (dermal, rat/rabbit, 90 days) | 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) |

Aspiration hazard : Not classified

| Citral (5392-40-5) | |
|---|---|
| Viscosity, kinematic | 2.42 mm²/s Temp.: 20 °C |

| Benzyl alcohol (100-51-6) | |
|---|---|
| Viscosity, kinematic | 4.851 mm²/s |

| 4-methyl-3-decen-5-ol (81782-77-6) | |
|---|---|
| Viscosity, kinematic | 18 mm²/s Temp.: 20 °C |

| Eucalyptus oil (84625-32-1) | |
|---|---|
| Viscosity, kinematic | 1.79 mm²/s Temp.: '40°C' Parameter: 'kinematic viscosity (in mm²/s)' |

### 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.

| Geraniol (106-24-1) | |
|---|---|
| LC50 - Fish [1] | ≈ 22 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) |
| EC50 - Crustacea [1] | 10.8 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 13.1 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |

| Eugenol (97-53-0) | |
|---|---|
| LC50 - Fish [1] | 13 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) |
| EC50 - Crustacea [1] | 1.05 mg/l Test organisms (species): Daphnia magna |

| **Bergamot acetoacetate (69103-01-1)** | |
|---|---|
| EC50 - Crustacea [1] | > 18 mg/l Test organisms (species): Daphnia magna |
| **Guaiacwood acetate (94333-88-7)** | |
| EC50 - Crustacea [1] | 0.33 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | > 0.31 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| **2-phenylethanol (60-12-8)** | |
| LC50 - Fish [1] | 215 – 464 mg/l Test organisms (species): Leuciscus idus |
| EC50 - Crustacea [1] | 287.17 mg/l Test organisms (species): Daphnia magna |
| **Citral (5392-40-5)** | |
| LC50 - Fish [1] | 6.78 mg/l Test organisms (species): Leuciscus idus |
| EC50 - Crustacea [1] | 6.8 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 103.8 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| **Linalool (78-70-6)** | |
| LC50 - Fish [1] | 27.8 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) |
| EC50 - Crustacea [1] | 59 mg/l Test organisms (species): Daphnia magna |
| EC50 96h - Algae [1] | 88.3 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| EC50 96h - Algae [2] | 156.7 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| **2,6,10-trimethylundec-9-enal (141-13-9)** | |
| LC50 - Fish [1] | > 0.6087 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) |
| LC50 - Fish [2] | > 0.4738 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) |
| EC50 - Crustacea [1] | 0.9 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | > 0.5877 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| **Vernaldehyde (66327-54-6)** | |
| EC50 - Crustacea [1] | 0.17 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 1.8 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| **cis-3-Hexenyl benzoate (25152-85-6)** | |
| EC50 - Crustacea [1] | 1.5 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 1.3 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| **d-Limonene (5989-27-5)** | |
| LC50 - Fish [1] | 720 µg/l Test organisms (species): Pimephales promelas |
| LC50 - Fish [2] | 702 µg/l Test organisms (species): Pimephales promelas |
| EC50 - Crustacea [1] | 0.307 mg/l Test organisms (species): Daphnia magna |

| d-Limonene (5989-27-5) | |
|---|---|
| EC50 - Crustacea [2] | 0.51 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 0.32 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| EC50 72h - Algae [2] | 0.214 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |

| Benzyl alcohol (100-51-6) | |
|---|---|
| LC50 - Fish [1] | 460 mg/l Test organisms (species): Pimephales promelas |
| EC50 - Crustacea [1] | 230 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 770 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| EC50 72h - Algae [2] | 500 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| EC50 96h - Algae [1] | 76.828 mg/l Test organisms (species): other: |
| NOEC chronic fish | 48.897 mg/l Test organisms (species): other: Duration: '30 d' |

| Myrcenyl acetate (1118-39-4) | |
|---|---|
| EC50 - Crustacea [1] | 6.3 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 19 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |

| Citronellal (106-23-0) | |
|---|---|
| LC50 - Fish [1] | ≈ 22 mg/l Test organisms (species): Leuciscus idus |
| EC50 - Crustacea [1] | 8.7 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 13.33 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| EC50 72h - Algae [2] | 6.74 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |

| Nerol (106-25-2) | |
|---|---|
| LC50 - Fish [1] | 20.3 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) |
| EC50 - Crustacea [1] | 32.4 mg/l Test organisms (species): Daphnia magna |

| 4-methyl-3-decen-5-ol (81782-77-6) | |
|---|---|
| LC50 - Fish [1] | 3 mg/l Test organisms (species): Pimephales promelas |
| EC50 - Crustacea [1] | 0.4 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 3.6 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| EC50 96h - Algae [1] | 3.8 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| NOEC chronic algae | 1.3 mg/l Test organisms (species): Pseudokirchneriella subcapitata |

| cis-hex-3-en-1-ol (928-96-1) | |
|---|---|
| LC50 - Fish [1] | > 100 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) |
| EC50 - Crustacea [1] | > 100 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | > 76 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |

| 5-methylheptan-3-one oxime (22457-23-4) | |
|---|---|
| LC50 - Fish [1] | 51.451 mg/l Test organisms (species): |
| EC50 - Crustacea [1] | 44 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 62 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| NOEC chronic algae | 10 mg/l 72 h, Pseudokirchneriella subcapitata, OECD Test Guideline 201 |

| Eucalyptus oil (84625-32-1) | |
|---|---|
| EC50 - Crustacea [1] | 0.307 mg/l Test organisms (species): Daphnia magna |
| EC50 - Crustacea [2] | 0.475 mg/l Test organisms (species): Daphnia magna |
| EC50 96h - Algae [1] | > 74 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |

## 12.2. Persistence and degradability

| Birch Leaf Givco 166 | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Geraniol (106-24-1) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Eugenol (97-53-0) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Citronellol (106-22-9) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Bergamot acetoacetate (69103-01-1) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Guaiacwood acetate (94333-88-7) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| 2-phenylethanol (60-12-8) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Citral (5392-40-5) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Linalool (78-70-6) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| 2,6,10-trimethylundec-9-enal (141-13-9) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Vernaldehyde (66327-54-6) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| cis-3-Hexenyl benzoate (25152-85-6) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| d-Limonene (5989-27-5) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Benzyl alcohol (100-51-6) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Myrcenyl acetate (1118-39-4) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| 2,4-dimethylcyclohex-3-ene-1-carbaldehyde (68039-49-6) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Citronellal (106-23-0) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| beta-Pinene (127-91-3) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| delta-3-Carene (13466-78-9) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| 2-Methoxy-p-cresol (93-51-6) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Isoeugenol (97-54-1) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Nerol (106-25-2) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| 4-methyl-3-decen-5-ol (81782-77-6) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |
| Biodegradation | 73 % |

| cis-hex-3-en-1-ol (928-96-1) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| 5-methylheptan-3-one oxime (22457-23-4) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Eucalyptus oil (84625-32-1) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

### 12.3. Bioaccumulative potential

| Citral (5392-40-5) | |
|---|---|
| BCF - Fish [1] | 89.72 |
| Partition coefficient n-octanol/water (Log Kow) | 2.76 Temp.: 25 °C |

| 2,6,10-trimethylundec-9-enal (141-13-9) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 6.2 |

| Benzyl alcohol (100-51-6) | |
|---|---|
| Bioconcentration factor (BCF REACH) | 1.37 |

| 4-methyl-3-decen-5-ol (81782-77-6) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 3.9 |

| 5-methylheptan-3-one oxime (22457-23-4) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 2.3 |

### 12.4. Mobility in soil

| Citral (5392-40-5) | |
|---|---|
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 2.169 |

| 4-methyl-3-decen-5-ol (81782-77-6) | |
|---|---|
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 3.07 |

### 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

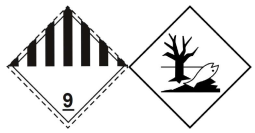
### 13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.

## SECTION 14: Transport information

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

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| **14.1. UN number or ID number** | | | | |
| UN 3082 | UN 3082 | UN 3082 | UN 3082 | UN 3082 |
| **14.2. UN proper shipping name** | | | | |
| ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Birch Leaf Givco 166) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Birch Leaf Givco 166) | Environmentally hazardous substance, liquid, n.o.s. (Birch Leaf Givco 166) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Birch Leaf Givco 166) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Birch Leaf Givco 166) |

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| **Transport document description** | | | | |
| UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Birch Leaf Givco 166), 9, III, (-) | UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Birch Leaf Givco 166), 9, III, MARINE POLLUTANT | UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Birch Leaf Givco 166), 9, III | UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Birch Leaf Givco 166), 9, III | UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Birch Leaf Givco 166), 9, III |
| **14.3. Transport hazard class(es)** | | | | |
| 9 | 9 | 9 | 9 | 9 |
|  |  |  |  |  |
| **14.4. Packing group** | | | | |
| III | III | III | III | III |
| **14.5. Environmental hazards** | | | | |
| Dangerous for the environment: Yes | Dangerous for the environment: Yes<br>Marine pollutant: Yes<br>EmS-No. (Fire): F-A<br>EmS-No. (Spillage): S-F | Dangerous for the environment: Yes | Dangerous for the environment: Yes | Dangerous for the environment: Yes |
| No supplementary information available | | | | |

## 14.6. Special precautions for user

### Overland transport

Classification code (ADR) : M6
Special provisions (ADR) : 274, 335, 375, 601, 650
Limited quantities (ADR) : 5l
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) : -

### Transport by sea

Special provisions (IMDG) : 274, 335, 375, 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 |
| 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, A215 |
| ERG code (IATA) | : | 9L |

### Inland waterway transport

| | | |
|---|---|---|
| Classification code (ADN) | : | M6 |
| Special provisions (ADN) | : | 274, 335, 375, 601, 650 |
| Limited quantities (ADN) | : | 5 L |
| Excepted quantities (ADN) | : | E1 |
| Carriage permitted (ADN) | : | T |
| Equipment required (ADN) | : | PP |
| Number of blue cones/lights (ADN) | : | 0 |

### Rail transport

| | | |
|---|---|---|
| Classification code (RID) | : | M6 |
| Special provisions (RID) | : | 274, 335, 375, 601, 650 |
| Limited quantities (RID) | : | 5L |
| Excepted quantities (RID) | : | E1 |
| Packing instructions (RID) | : | P001, IBC03, LP01, R001 |
| Special packing provisions (RID) | : | PP1 |
| Mixed packing provisions (RID) | : | MP19 |
| Portable tank and bulk container instructions (RID) | : | T4 |
| Portable tank and bulk container special provisions (RID) | : | TP1, TP29 |
| Tank codes for RID tanks (RID) | : | LGBV |
| Transport category (RID) | : | 3 |
| Special provisions for carriage – Packages (RID) | : | W12 |
| Special provisions for carriage - Loading, unloading and handling (RID) | : | CW13, CW31 |
| Colis express (express parcels) (RID) | : | CE8 |
| Hazard identification number (RID) | : | 90 |

## 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

**EU-Regulations**

**REACH Annex XVII (Restriction List)**

| EU restriction list (REACH Annex XVII) | | |
|---|---|---|
| **Reference code** | **Applicable on** | **Entry title or description** |
| 3(a) | d-Limonene ; beta-Pinene ; delta-3-Carene ; cis-hex-3-en-1-ol ; Eucalyptus 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) | Birch Leaf Givco 166 ; Geraniol ; Eugenol ; Bergamot acetoacetate ; Guaiacwood acetate ; 2-phenylethanol ; Citral ; Linalool ; 2,6,10-trimethylundec-9-enal ; Vernaldehyde ; cis-3-Hexenyl benzoate ; d-Limonene ; Benzyl alcohol ; Myrcenyl acetate ; 2,4-dimethylcyclohex-3-ene-1-carbaldehyde ; Citronellal ; beta-Pinene ; delta-3-Carene ; 2-Methoxy-p-cresol ; Isoeugenol ; Nerol ; cis-hex-3-en-1-ol ; Eucalyptus 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) | Birch Leaf Givco 166 ; Bergamot acetoacetate ; Guaiacwood acetate ; 2,6,10-trimethylundec-9-enal ; Vernaldehyde ; cis-3-Hexenyl benzoate ; d-Limonene ; Myrcenyl acetate ; 2,4-dimethylcyclohex-3-ene-1-carbaldehyde ; 4-methyl-3-decen-5-ol ; 5-methylheptan-3-one oxime ; Eucalyptus 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 |

**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 (2024/590)**

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

### Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

### Explosives Precursors Regulation (EU 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 (EC 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)

### National regulations

### Netherlands

| | | |
|---|---|---|
| SZW-lijst van kankerverwekkende stoffen | : | Bergamot acetoacetate,Guaiacwood acetate,Vernaldehyde,2,4-dimethylcyclohex-3-ene-1-carbaldehyde,Eucalyptus oil are listed |
| SZW-lijst van mutagene stoffen | : | Bergamot acetoacetate,Guaiacwood acetate,Vernaldehyde,2,4-dimethylcyclohex-3-ene-1-carbaldehyde,Eucalyptus oil are 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 |

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

| Abbreviations and acronyms: | |
|---|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| COD | Chemical oxygen demand (COD) |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC-No. | European Community number |
| EC50 | Median effective concentration |
| EN | European Standard |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |

| Abbreviations and acronyms: | |
|---|---|
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limit |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| ThOD | Theoretical oxygen demand (ThOD) |
| TLM | Median Tolerance Limit |
| VOC | Volatile Organic Compounds |
| CAS-No. | Chemical Abstract Service number |
| N.O.S. | Not Otherwise Specified |
| vPvB | Very Persistent and Very Bioaccumulative |
| ED | Endocrine disruptor |

| Full text of H- and EUH-statements: | |
|---|---|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 |
| Acute Tox. 4 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist) 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 |
| Repr. 2 | Reproductive toxicity, Category 2 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| Skin Sens. 1 | Skin sensitisation, Category 1 |
| Skin Sens. 1A | Skin sensitisation, category 1A |
| Skin Sens. 1B | Skin sensitisation, category 1B |
| STOT SE 3 | Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation |
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |

| Full text of H- and EUH-statements: | |
|---|---|
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| 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. |

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.