# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

# Room Scent Cotton Flower

Version number: GHS 1.0 Date of compilation: 03.03.2025

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

### 1.1 Product identifier

Trade name **Room Scent Cotton Flower**
**Raumduft Cotton Flower**

Unique formula identifier (UFI) 5600-T0W7-9002-4MX7

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

Relevant identified uses room scent
general use

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

Manufacturer:
PROMIN CS spol. s r.o.
Libá 101
351 31 Libá
Czech Republic
Telephone: +420 354 509 253
Website: www.promin.cz

Distributor:
Hotelbedarf24 GmbH & Co. KG
Heidestraße 8
95173 Schönwald
Germany
Tel: +49 9287 800 679 0
E-Mail: info@hotelbedarf24.de

e-mail (competent person) burda@promin.cz (Radek Burda)

### 1.4 Emergency telephone number

Emergency information service Toxicology Department of the II Medical Clinic Rechts der Isar of the Technical University Munich
Telephone: 089/1 92 40 (Notruf)
Telefax: 089/41 40-24 67
E-Mail: tox@mri.tum.de
Web: http://www.toxinfo.med.tum.de/node/380

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

| Section | Hazard class | Category | Hazard class and category | Hazard statement |
|---|---|---|---|---|
| 2.6 | flammable liquid | 2 | Flam. Liq. 2 | H225 |
| 3.3 | serious eye damage/eye irritation | 2 | Eye Irrit. 2 | H319 |
| 3.4S | skin sensitisation | 1B | Skin Sens. 1B | H317 |
| 4.1C | hazardous to the aquatic environment - chronic hazard | 3 | Aquatic Chronic 3 | H412 |

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses. Highly flammable liquid and vapour. Causes serious eye irritation.

## 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

- Signal word danger

- Pictograms

GHS02, GHS07

- Hazard statements

| | |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H412 | Harmful to aquatic life with long lasting effects. |

- Precautionary statements

| | |
|---|---|
| P102 | Keep out of reach of children. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P273 | Avoid release to the environment. |
| P302+P352 | IF ON SKIN: Wash with plenty of 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. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/container as hazardous waste. |

- Hazardous ingredients for labelling

Heptanal, 2-(phenylmethylene)-, (2E)-, 4-tert-butyl-cyclohexyl acetate, α-hexylcinnamaldehyde, 2-methyl-undecanal, 3-p-cumenyl-2-methylpropionaldehyde, Citronellol, 7-hydroxycitronellal, Ethyllinalool, (2E)-3-phenylprop-2-en-1-ol, Coumarin, (R)-p-mentha-1,8-diene, Eugenol, Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol, Tetrahydrolinalool, Geraniol, p-mentha-1,4(8)-diene, 3,4,5,6,6-pentamethylhept-3-en-2-one (and isomers)

## 2.3 Other hazards

There is no additional information.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

# SECTION 3: Composition/information on ingredients

## 3.2 Mixtures

| Name of substance | Identifier | Wt% | Classification acc. to 1272/2008/EC | Pictograms | Notes |
|---|---|---|---|---|---|
| Ethanol | CAS No 64-17-5<br><br>EC No 200-578-6 | 76,8 | Flam. Liq. 2 / H225<br>Eye Irrit. 2 / H319 |  | OEL |

| Name of substance | Identifier | Wt% | Classification acc. to 1272/2008/EC | Pictograms | Notes |
|---|---|---|---|---|---|
| | REACH Reg. No 01-2119457610-43-xxxx | | | | |
| 2-phenylethanol | CAS No 60-12-8<br><br>EC No 200-456-2<br><br>REACH Reg. No 01-2119963921-31-XXXX | 0,55 – < 1,1 | Acute Tox. 4 / H302<br>Eye Irrit. 2 / H319 |  | |
| Benzyl acetate | CAS No 140-11-4<br><br>EC No 205-399-7 | 0,55 – < 1,1 | Aquatic Chronic 3 / H412 | | |
| 4-tert-butylcyclohexyl acetate | CAS No 32210-23-4<br><br>EC No 250-954-9<br><br>REACH Reg. No 01-2119976286-24-xxxx | 0,55 – < 1,1 | Skin Sens. 1B / H317 |  | |
| Heptanal, 2-(phenyl-methylene)-, (2E)- | CAS No 78605-96-6<br><br>EC No 800-696-3<br><br>REACH Reg. No 01-2119978288-18-xxxx | 0,55 – < 1,1 | Skin Sens. 1B / H317<br>Aquatic Chronic 2 / H411 |  | |
| 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate | CAS No 68912-13-0<br><br>EC No 272-805-7<br><br>REACH Reg. No 01-2119969447-21-xxxx | 0,55 – < 1,1 | Aquatic Chronic 2 / H411 |  | |
| 2-methylbutyl 2-hydroxy-benzoate; pentyl 2-hydroxybenzoate | EC No 911-280-7<br><br>REACH Reg. No 01-2119969444-27-xxxx | 0,55 – < 1,1 | Acute Tox. 4 / H302<br>Aquatic Acute 1 / H400<br>Aquatic Chronic 2 / H411 |  | |
| Diphenyl ether | CAS No 101-84-8<br><br>EC No 202-981-2 | 0,275 – < 0,55 | Eye Irrit. 2 / H319<br>Aquatic Acute 1 / H400<br>Aquatic Chronic 3 / H412 |  | IOELV |
| 2-methylundecanal | CAS No 110-41-8<br><br>EC No 203-765-0<br><br>REACH Reg. No 01-2119969443-29-xxxx | 0,275 – < 0,55 | Skin Irrit. 2 / H315<br>Skin Sens. 1B / H317<br>Aquatic Acute 1 / H400<br>Aquatic Chronic 1 / H410 |  | |

| Name of substance | Identifier | Wt% | Classification acc. to 1272/2008/EC | Pictograms | Notes |
|---|---|---|---|---|---|
| 3-p-cumenyl-2-methylpropionaldehyde | CAS No 103-95-7<br><br>EC No 203-161-7<br><br>REACH Reg. No 01-2119970582-32-xxxx | 0,275 – < 0,55 | Skin Irrit. 2 / H315<br>Skin Sens. 1B / H317<br>Aquatic Chronic 3 / H412 |  | |
| α-hexylcinnamaldehyde | CAS No 101-86-0<br><br>EC No 202-983-3 | 0,275 – < 0,55 | Skin Sens. 1B / H317<br>Aquatic Acute 1 / H400<br>Aquatic Chronic 2 / H411 |  | |
| Citronellol | CAS No 106-22-9<br><br>EC No 203-375-0<br><br>REACH Reg. No 01-2119453995-23-xxxx | 0,275 – < 0,55 | Skin Irrit. 2 / H315<br>Eye Irrit. 2 / H319<br>Skin Sens. 1B / H317 |  | |
| Anisaldehyde | CAS No 123-11-5<br><br>EC No 204-602-6<br><br>REACH Reg. No 01-2119977101-43-xxxx | 0,275 – < 0,55 | Repr. 2 / H361fd<br>Aquatic Chronic 3 / H412 |  | |
| 7-hydroxycitronellal | CAS No 107-75-5<br><br>EC No 203-518-7 | 0,11 – < 0,275 | Eye Irrit. 2 / H319<br>Skin Sens. 1B / H317 |  | |
| Ethyllinalool | CAS No 10339-55-6<br><br>EC No 233-732-6<br><br>REACH Reg. No 01-2119969272-32-xxxx | 0,11 – < 0,275 | Skin Irrit. 2 / H315<br>Eye Irrit. 2 / H319<br>Skin Sens. 1B / H317 |  | |
| (2E)-3-phenylprop-2-en-1-ol | CAS No 104-54-1<br><br>EC No 203-212-3<br><br>REACH Reg. No 01-2119934496-29-xxxx<br>01-2120774743-45-xxxx | 0,11 – < 0,275 | Acute Tox. 4 / H302<br>Skin Sens. 1 / H317<br>Aquatic Chronic 2 / H411 |  | |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran | CAS No 1222-05-5<br><br>EC No 214-946-9<br><br>Index No 603-212-00-7 | 0,11 – < 0,275 | Aquatic Acute 1 / H400<br>Aquatic Chronic 1 / H410 |  | GHS-HC |

| Name of substance | Identifier | Wt% | Classification acc. to 1272/2008/EC | Pictograms | Notes |
|---|---|---|---|---|---|
| | REACH Reg. No 01-2119488227-29-xxxx | | | | |
| 3,4,5,6,6-pentamethyl-hept-3-en-2-one (and isomers) | CAS No 81786-73-4<br><br>EC No 279-822-9 | 0,011 – < 0,11 | Skin Sens. 1B / H317<br>Aquatic Chronic 2 / H411 |  | |
| (R)-p-mentha-1,8-diene | CAS No 5989-27-5<br><br>EC No 227-813-5<br><br>Index No 601-029-00-7 | 0,011 – < 0,11 | 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 3 / H412 |  | |
| p-mentha-1,4(8)-diene | CAS No 586-62-9<br><br>EC No 209-578-0 | 0,011 – < 0,11 | Skin Sens. 1B / H317<br>Asp. Tox. 1 / H304<br>Aquatic Acute 1 / H400<br>Aquatic Chronic 1 / H410 |  | |
| Coumarin | CAS No 91-64-5<br><br>EC No 202-086-7<br><br>REACH Reg. No 01-2119949300-45-xxxx | 0,011 – < 0,11 | Acute Tox. 4 / H302<br>Skin Sens. 1 / H317<br>Aquatic Chronic 3 / H412 |  | |
| Geraniol | CAS No 106-24-1<br><br>EC No 203-377-1<br><br>Index No 603-241-00-5<br><br>REACH Reg. No 01-2119552430-49-xxxx | 0,011 – < 0,11 | Skin Irrit. 2 / H315<br>Eye Dam. 1 / H318<br>Skin Sens. 1 / H317 |  | |
| Tetrahydrolinalool | CAS No 78-69-3<br><br>EC No 201-133-9 | 0,011 – < 0,11 | Skin Irrit. 2 / H315<br>Eye Irrit. 2 / H319<br>Skin Sens. 1B / H317 |  | |
| Eugenol | CAS No 97-53-0<br><br>EC No 202-589-1<br><br>REACH Reg. No 01-2119971802-33-xxxx | 0,011 – < 0,11 | Acute Tox. 4 / H302<br>Eye Irrit. 2 / H319<br>Skin Sens. 1B / H317 |  | |
| Reaction Mass of Cis-4-(isopropyl)cyclohexane-methanol and Trans-4-(isopropyl)cyclohexane-methanol | CAS No 5502-75-0<br><br>EC No 939-719-8<br><br>REACH Reg. No 01-2119983532-32- | 0,011 – < 0,11 | Skin Irrit. 2 / H315<br>Skin Sens. 1B / H317<br>Aquatic Chronic 3 / H412 |  | |

| Name of substance | Identifier | Wt% | Classification acc. to 1272/2008/EC | Pictograms | Notes |
|---|---|---|---|---|---|
| | xxxx | | | | |

Notes

GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI)
IOELV: Substance with a community indicative occupational exposure limit value
OEL: substance with the national occupational exposure limit values

Hazardous ingredients: Concentration limit, M-Factor, ATE

| Name of substance | Specific Conc. Limits | M-Factors | ATE | Exposure route |
|---|---|---|---|---|
| Ethanol | Eye Irrit. 2; H319: C ≥ 50 % | - | - | |
| 2-phenylethanol | - | - | 1.609 $^{mg}/_{kg}$ | oral |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | - | - | 2.000 $^{mg}/_{kg}$ | oral |
| (2E)-3-phenylprop-2-en-1-ol | - | - | 2.000 $^{mg}/_{kg}$ | oral |
| Coumarin | - | - | 680 $^{mg}/_{kg}$<br>293 $^{mg}/_{kg}$ | oral<br>dermal |
| (R)-p-mentha-1,8-diene | - | M-factor (acute) = 1 | - | |

### Remarks

For full text of abbreviations: see SECTION 16

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

#### Following skin contact

Wash with plenty of soap and water. Take off immediately all contaminated clothing.

#### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. If eye irritation persists: Get medical advice/attention.

#### Following ingestion

Do NOT induce vomiting. Get immediate medical advice/attention.

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

Description of known symptoms following exposure, if relevant - see section 11.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Extinguishing measures to surroundings.

#### Suitable extinguishing media

foam, fire extinguishing powder, carbon dioxide (CO2)

Unsuitable extinguishing media

water jet

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

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

Hazardous combustion products

nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO2)

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance. Fire fighting crew should be adequately trained and equipped with self-contained breathing apparatus and full protective clothing. Cool closed containers exposed to fire with water spray.

## SECTION 6: Accidental release measures

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

Stop the leak if possible and safe to do so (seal, close the liquid isolation valve, put the leaking or damaged container to emergency container). Eliminate all sources of ignition. Ventilate affected area.

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. Collect contaminated soil and dispose of it.

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

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece), sawdust, kieselgur (diatomite), sand, universal binder.

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal.

### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Comply with the current legislation concerning the prevention of industrial risks. Containers which were opened must be carefully closed and kept upright to prevent leakage.

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air.

- Handling of incompatible substances or mixtures

Wear suitable personal protection. Do not breathe vapour.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

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

Protect against frost, fire and direct sunlight.

Managing of associated risks

- Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight. Ensure easy access to fire fighting measures in the place of use and storage.

- Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

### 7.3 Specific end use(s)

See section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### National limit values

Occupational exposure limit values (Workplace Exposure Limits)

| Country | Name of substance | CAS No | Identifier | TWA [ppm] | TWA [mg/m³] | STEL [ppm] | STEL [mg/m³] | Source |
|---|---|---|---|---|---|---|---|---|
| DE | Diphenyl ether | 101-84-8 | MAK | 1 | 7,1 | 1 | 7,1 | DFG |
| DE | Diphenyl ether | 101-84-8 | AGW | 1 | 7,1 | 1 | 7,1 | TRGS 900 |
| DE | (R)-p-mentha-1,8-diene | 5989-27-5 | AGW | 5 | 28 | 20 | 112 | TRGS 900 |
| DE | (R)-p-mentha-1,8-diene | 5989-27-5 | MAK | 5 | 28 | 20 | 112 | DFG |
| DE | 2-phenylethanol | 60-12-8 | MAK | | | | | DFG |
| DE | Ethanol | 64-17-5 | MAK | 200 | 380 | 800 | 1.520 | DFG |
| DE | Ethanol | 64-17-5 | AGW | 200 | 380 | 800 | 1.520 | TRGS 900 |
| EU | Diphenyl ether | 101-84-8 | IOELV | 1 | 7 | 2 | 14 | 2017/164/EU |

Notation

| | |
|---|---|
| STEL | short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified) |
| TWA | time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified) |

### Relevant DNELs of components of the mixture

| Name of substance | CAS No | Endpoint | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
|---|---|---|---|---|---|---|
| Ethanol | 64-17-5 | DNEL | 343 mg/kg bw/day | human, dermal | worker (industry) | not specified |
| Ethanol | 64-17-5 | DNEL | 206 mg/kg bw/day | human, dermal | consumer (private households) | not specified |
| Ethanol | 64-17-5 | DNEL | 950 mg/m³ | human, inhalatory | worker (industry) | not specified |
| Ethanol | 64-17-5 | DNEL | 1.900 mg/m³ | human, inhalatory | worker (industry) | not specified |
| Ethanol | 64-17-5 | DNEL | 114 mg/m³ | human, inhalatory | consumer (private households) | not specified |
| Ethanol | 64-17-5 | DNEL | 950 mg/m³ | human, inhalatory | consumer (private households) | not specified |
| Ethanol | 64-17-5 | DNEL | 87 mg/kg bw/day | human, oral | consumer (private households) | not specified |
| Benzyl acetate | 140-11-4 | DNEL | 9 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Benzyl acetate | 140-11-4 | DNEL | 2,5 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Benzyl acetate | 140-11-4 | DNEL | 2,2 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| Benzyl acetate | 140-11-4 | DNEL | 1,3 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| Benzyl acetate | 140-11-4 | DNEL | 1,3 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| 2-phenylethanol | 60-12-8 | DNEL | 59,9 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| 2-phenylethanol | 60-12-8 | DNEL | 21,2 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| 2-phenylethanol | 60-12-8 | DNEL | 17,7 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| 2-phenylethanol | 60-12-8 | DNEL | 12,7 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| 2-phenylethanol | 60-12-8 | DNEL | 5,1 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | DNEL | 5,97 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | DNEL | 141,1 mg/m³ | human, inhalatory | worker (industry) | acute - systemic effects |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | DNEL | 1,69 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | DNEL | 1,05 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | DNEL | 34,78 mg/m³ | human, inhalatory | consumer (private households) | acute - systemic effects |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | DNEL | 0,605 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |

| Name of substance | CAS No | Endpoint | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
|---|---|---|---|---|---|---|
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | DNEL | 0,605 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | DNEL | 20 mg/kg bw/day | human, oral | consumer (private households) | acute - systemic effects |
| Diphenyl ether | 101-84-8 | DNEL | 59 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Diphenyl ether | 101-84-8 | DNEL | 7 mg/m³ | human, inhalatory | worker (industry) | chronic - local effects |
| Diphenyl ether | 101-84-8 | DNEL | 14 mg/m³ | human, inhalatory | worker (industry) | acute - local effects |
| Diphenyl ether | 101-84-8 | DNEL | 25 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| 2-methylundecanal | 110-41-8 | DNEL | 36,89 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| 2-methylundecanal | 110-41-8 | DNEL | 352,6 mg/m³ | human, inhalatory | worker (industry) | acute - systemic effects |
| 2-methylundecanal | 110-41-8 | DNEL | 92,21 mg/m³ | human, inhalatory | worker (industry) | chronic - local effects |
| 2-methylundecanal | 110-41-8 | DNEL | 881,6 mg/m³ | human, inhalatory | worker (industry) | acute - local effects |
| 2-methylundecanal | 110-41-8 | DNEL | 10,46 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| 2-methylundecanal | 110-41-8 | DNEL | 100 mg/kg bw/day | human, dermal | worker (industry) | acute - systemic effects |
| 2-methylundecanal | 110-41-8 | DNEL | 9,1 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| 2-methylundecanal | 110-41-8 | DNEL | 86,96 mg/m³ | human, inhalatory | consumer (private households) | acute - systemic effects |
| 2-methylundecanal | 110-41-8 | DNEL | 22,74 mg/m³ | human, inhalatory | consumer (private households) | chronic - local effects |
| 2-methylundecanal | 110-41-8 | DNEL | 217,4 mg/m³ | human, inhalatory | consumer (private households) | acute - local effects |
| 2-methylundecanal | 110-41-8 | DNEL | 5,23 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| 2-methylundecanal | 110-41-8 | DNEL | 50 mg/kg bw/day | human, dermal | consumer (private households) | acute - systemic effects |
| 2-methylundecanal | 110-41-8 | DNEL | 5,23 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| 2-methylundecanal | 110-41-8 | DNEL | 25 mg/kg bw/day | human, oral | consumer (private households) | acute - systemic effects |
| Anisaldehyde | 123-11-5 | DNEL | 5,88 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Anisaldehyde | 123-11-5 | DNEL | 3,33 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Anisaldehyde | 123-11-5 | DNEL | 1,74 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| Anisaldehyde | 123-11-5 | DNEL | 2 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| Anisaldehyde | 123-11-5 | DNEL | 1 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| 3-p-cumenyl-2-methylpropionaldehyde | 103-95-7 | DNEL | 1,23 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |

| Name of substance | CAS No | Endpoint | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
|---|---|---|---|---|---|---|
| 3-p-cumenyl-2-methyl-propionaldehyde | 103-95-7 | DNEL | 0,35 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| 3-p-cumenyl-2-methyl-propionaldehyde | 103-95-7 | DNEL | 0,22 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| 3-p-cumenyl-2-methyl-propionaldehyde | 103-95-7 | DNEL | 0,13 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| 3-p-cumenyl-2-methyl-propionaldehyde | 103-95-7 | DNEL | 0,13 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| 7-hydroxycitronellal | 107-75-5 | DNEL | 18 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| 7-hydroxycitronellal | 107-75-5 | DNEL | 1,9 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| 7-hydroxycitronellal | 107-75-5 | DNEL | 500 µg/cm² | human, dermal | worker (industry) | acute - local effects |
| 7-hydroxycitronellal | 107-75-5 | DNEL | 5,4 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| 7-hydroxycitronellal | 107-75-5 | DNEL | 1,1 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| 7-hydroxycitronellal | 107-75-5 | DNEL | 500 µg/cm² | human, dermal | consumer (private households) | acute - local effects |
| 7-hydroxycitronellal | 107-75-5 | DNEL | 0,6 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| Ethyllinalool | 10339-55-6 | DNEL | 3 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Ethyllinalool | 10339-55-6 | DNEL | 18 mg/m³ | human, inhalatory | worker (industry) | acute - systemic effects |
| Ethyllinalool | 10339-55-6 | DNEL | 2,7 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Ethyllinalool | 10339-55-6 | DNEL | 5,5 mg/kg bw/day | human, dermal | worker (industry) | acute - systemic effects |
| Ethyllinalool | 10339-55-6 | DNEL | 0,74 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| Ethyllinalool | 10339-55-6 | DNEL | 4,4 mg/m³ | human, inhalatory | consumer (private households) | acute - systemic effects |
| Ethyllinalool | 10339-55-6 | DNEL | 1,4 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| Ethyllinalool | 10339-55-6 | DNEL | 2,7 mg/kg bw/day | human, dermal | consumer (private households) | acute - systemic effects |
| Ethyllinalool | 10339-55-6 | DNEL | 0,2 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| Ethyllinalool | 10339-55-6 | DNEL | 1,3 mg/kg bw/day | human, oral | consumer (private households) | acute - systemic effects |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | DNEL | 2,64 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | DNEL | 0,749 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | DNEL | 0,465 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | DNEL | 0,268 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | DNEL | 0,268 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |

| Name of substance | CAS No | Endpoint | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
|---|---|---|---|---|---|---|
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-indeno[5,6-c]pyran | 1222-05-5 | DNEL | 13,5 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-indeno[5,6-c]pyran | 1222-05-5 | DNEL | 36,7 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-indeno[5,6-c]pyran | 1222-05-5 | DNEL | 4 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-indeno[5,6-c]pyran | 1222-05-5 | DNEL | 22 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-indeno[5,6-c]pyran | 1222-05-5 | DNEL | 2,3 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| Eugenol | 97-53-0 | DNEL | 21,2 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Eugenol | 97-53-0 | DNEL | 6 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Eugenol | 97-53-0 | DNEL | 5,22 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| Eugenol | 97-53-0 | DNEL | 3 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| Eugenol | 97-53-0 | DNEL | 3 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | DNEL | 6,63 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | DNEL | 1,88 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | DNEL | 1,63 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | DNEL | 0,94 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | DNEL | 0,94 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| Tetrahydrolinalool | 78-69-3 | DNEL | 11,14 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Tetrahydrolinalool | 78-69-3 | DNEL | 3,16 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Tetrahydrolinalool | 78-69-3 | DNEL | 190 µg/cm² | human, dermal | worker (industry) | chronic - local effects |
| Tetrahydrolinalool | 78-69-3 | DNEL | 2,75 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |

| Name of substance | CAS No | Endpoint | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
|---|---|---|---|---|---|---|
| Tetrahydrolinalool | 78-69-3 | DNEL | 1,58 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| Tetrahydrolinalool | 78-69-3 | DNEL | 190 µg/cm² | human, dermal | consumer (private households) | chronic - local effects |
| Tetrahydrolinalool | 78-69-3 | DNEL | 1,58 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| Geraniol | 106-24-1 | DNEL | 11,8 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Geraniol | 106-24-1 | DNEL | 4,2 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Geraniol | 106-24-1 | DNEL | 11.800 µg/cm² | human, dermal | worker (industry) | chronic - local effects |
| Geraniol | 106-24-1 | DNEL | 3,5 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| Geraniol | 106-24-1 | DNEL | 2,5 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| Geraniol | 106-24-1 | DNEL | 1.180 µg/cm² | human, dermal | consumer (private households) | chronic - local effects |
| Geraniol | 106-24-1 | DNEL | 2 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |

### Relevant PNECs of components of the mixture

| Name of substance | CAS No | Endpoint | Threshold level | Organism | Environmental compartment | Exposure time |
|---|---|---|---|---|---|---|
| Ethanol | 64-17-5 | PNEC | 0,96 mg/l | not specified | water | short-term (single instance) |
| Ethanol | 64-17-5 | PNEC | 0,79 mg/l | not specified | marine water | short-term (single instance) |
| Ethanol | 64-17-5 | PNEC | 3,6 mg/kg | not specified | freshwater sediment | short-term (single instance) |
| Ethanol | 64-17-5 | PNEC | 0,63 mg/kg | not specified | soil | short-term (single instance) |
| Ethanol | 64-17-5 | PNEC | 580 mg/l | not specified | sewage treatment plant (STP) | short-term (single instance) |
| Benzyl acetate | 140-11-4 | PNEC | 0,018 mg/l | aquatic organisms | freshwater | short-term (single instance) |
| Benzyl acetate | 140-11-4 | PNEC | 0,002 mg/l | aquatic organisms | marine water | short-term (single instance) |
| Benzyl acetate | 140-11-4 | PNEC | 8,55 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| Benzyl acetate | 140-11-4 | PNEC | 0,526 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| Benzyl acetate | 140-11-4 | PNEC | 0,053 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| Benzyl acetate | 140-11-4 | PNEC | 0,094 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate | 68912-13-0 | PNEC | 91 µg/l | aquatic organisms | freshwater | short-term (single instance) |
| 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-in- | 68912-13-0 | PNEC | 9,1 µg/l | aquatic organisms | marine water | short-term (single instance) |

| Name of substance | CAS No | Endpoint | Threshold level | Organism | Environmental compartment | Exposure time |
|---|---|---|---|---|---|---|
| denyl propionate | | | | | | |
| 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate | 68912-13-0 | PNEC | 4,8 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate | 68912-13-0 | PNEC | 12,2 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate | 68912-13-0 | PNEC | 1,22 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate | 68912-13-0 | PNEC | 4,4 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| 2-phenylethanol | 60-12-8 | PNEC | 0,215 mg/l | not specified | freshwater | not specified |
| 2-phenylethanol | 60-12-8 | PNEC | 0,0215 mg/l | not specified | marine water | not specified |
| 2-phenylethanol | 60-12-8 | PNEC | 2,15 mg/l | not specified | water | intermittent release |
| 2-phenylethanol | 60-12-8 | PNEC | 10 mg/l | not specified | sewage treatment plant (STP) | not specified |
| 2-phenylethanol | 60-12-8 | PNEC | 1,454 mg/cm³ | not specified | freshwater sediment | not specified |
| 2-phenylethanol | 60-12-8 | PNEC | 0,1454 mg/cm³ | not specified | marine sediment | not specified |
| 2-phenylethanol | 60-12-8 | PNEC | 0,164 mg/kg | not specified | soil | not specified |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | PNEC | 2,44 µg/l | aquatic organisms | freshwater | short-term (single instance) |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | PNEC | 0,244 µg/l | aquatic organisms | marine water | short-term (single instance) |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | PNEC | 10 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | PNEC | 1,23 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | PNEC | 0,123 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | PNEC | 5,33 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| Diphenyl ether | 101-84-8 | PNEC | 0 mg/l | aquatic organisms | freshwater | short-term (single instance) |
| Diphenyl ether | 101-84-8 | PNEC | 0 mg/l | aquatic organisms | marine water | short-term (single instance) |
| Diphenyl ether | 101-84-8 | PNEC | 10 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| Diphenyl ether | 101-84-8 | PNEC | 0,093 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| Diphenyl ether | 101-84-8 | PNEC | 0,009 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| Diphenyl ether | 101-84-8 | PNEC | 0,018 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| 2-methylundecanal | 110-41-8 | PNEC | 0,66 | aquatic organisms | freshwater | short-term (single in- |

| Name of substance | CAS No | Endpoint | Threshold level | Organism | Environmental compartment | Exposure time |
|---|---|---|---|---|---|---|
| | | | µg/l | | | stance) |
| 2-methylundecanal | 110-41-8 | PNEC | 10 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| 2-methylundecanal | 110-41-8 | PNEC | 0,265 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| 2-methylundecanal | 110-41-8 | PNEC | 26,5 µg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| 2-methylundecanal | 110-41-8 | PNEC | 52,6 µg/kg | terrestrial organisms | soil | short-term (single instance) |
| Anisaldehyde | 123-11-5 | PNEC | 13 µg/l | aquatic organisms | freshwater | short-term (single instance) |
| Anisaldehyde | 123-11-5 | PNEC | 1,3 µg/l | aquatic organisms | marine water | short-term (single instance) |
| Anisaldehyde | 123-11-5 | PNEC | 8,5 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| Anisaldehyde | 123-11-5 | PNEC | 0,06 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| Anisaldehyde | 123-11-5 | PNEC | 0,006 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| Anisaldehyde | 123-11-5 | PNEC | 0,004 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| 3-p-cumenyl-2-methyl-propionaldehyde | 103-95-7 | PNEC | 8,8 µg/l | aquatic organisms | freshwater | short-term (single instance) |
| 3-p-cumenyl-2-methyl-propionaldehyde | 103-95-7 | PNEC | 0,88 µg/l | aquatic organisms | marine water | short-term (single instance) |
| 3-p-cumenyl-2-methyl-propionaldehyde | 103-95-7 | PNEC | 1 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| 3-p-cumenyl-2-methyl-propionaldehyde | 103-95-7 | PNEC | 1,02 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| 3-p-cumenyl-2-methyl-propionaldehyde | 103-95-7 | PNEC | 0,102 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| 3-p-cumenyl-2-methyl-propionaldehyde | 103-95-7 | PNEC | 0,199 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| 7-hydroxycitronellal | 107-75-5 | PNEC | 31,6 µg/l | aquatic organisms | freshwater | short-term (single instance) |
| 7-hydroxycitronellal | 107-75-5 | PNEC | 3,16 µg/l | aquatic organisms | marine water | short-term (single instance) |
| 7-hydroxycitronellal | 107-75-5 | PNEC | 10 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| 7-hydroxycitronellal | 107-75-5 | PNEC | 0,145 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| 7-hydroxycitronellal | 107-75-5 | PNEC | 0,015 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| 7-hydroxycitronellal | 107-75-5 | PNEC | 0,011 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| Ethyllinalool | 10339-55-6 | PNEC | 0,023 mg/l | aquatic organisms | freshwater | short-term (single instance) |
| Ethyllinalool | 10339-55-6 | PNEC | 0,002 mg/l | aquatic organisms | marine water | short-term (single instance) |
| Ethyllinalool | 10339-55-6 | PNEC | 10 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |

| Name of substance | CAS No | Endpoint | Threshold level | Organism | Environmental compartment | Exposure time |
|---|---|---|---|---|---|---|
| Ethyllinalool | 10339-55-6 | PNEC | 0,223 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| Ethyllinalool | 10339-55-6 | PNEC | 0,022 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| Ethyllinalool | 10339-55-6 | PNEC | 0,031 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | PNEC | 7,7 µg/l | aquatic organisms | freshwater | short-term (single instance) |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | PNEC | 0,77 µg/l | aquatic organisms | marine water | short-term (single instance) |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | PNEC | 16,13 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | PNEC | 0,118 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | PNEC | 11,8 µg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | PNEC | 19 µg/kg | terrestrial organisms | soil | short-term (single instance) |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-indeno[5,6-c]pyran | 1222-05-5 | PNEC | 6,8 µg/l | aquatic organisms | freshwater | short-term (single instance) |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-indeno[5,6-c]pyran | 1222-05-5 | PNEC | 0,44 µg/l | aquatic organisms | marine water | short-term (single instance) |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-indeno[5,6-c]pyran | 1222-05-5 | PNEC | 1 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-indeno[5,6-c]pyran | 1222-05-5 | PNEC | 2 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-indeno[5,6-c]pyran | 1222-05-5 | PNEC | 0,394 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-indeno[5,6-c]pyran | 1222-05-5 | PNEC | 1,5 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| Eugenol | 97-53-0 | PNEC | 1,13 µg/l | aquatic organisms | freshwater | short-term (single instance) |
| Eugenol | 97-53-0 | PNEC | 0,113 µg/l | aquatic organisms | marine water | short-term (single instance) |
| Eugenol | 97-53-0 | PNEC | 0,081 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| Eugenol | 97-53-0 | PNEC | 0,008 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| Eugenol | 97-53-0 | PNEC | 0,015 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | PNEC | 35 µg/l | aquatic organisms | freshwater | short-term (single instance) |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and | 5502-75-0 | PNEC | 3,5 µg/l | aquatic organisms | marine water | short-term (single instance) |

| Name of substance | CAS No | Endpoint | Threshold level | Organism | Environmental compartment | Exposure time |
|---|---|---|---|---|---|---|
| Trans-4-(isopropyl)cyclohexanemethanol | | | | | | |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | PNEC | 1,9 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | PNEC | 2,118 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | PNEC | 211,8 µg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | PNEC | 0,403 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| Tetrahydrolinalool | 78-69-3 | PNEC | 0,009 mg/l | aquatic organisms | freshwater | short-term (single instance) |
| Tetrahydrolinalool | 78-69-3 | PNEC | 0,001 mg/l | aquatic organisms | marine water | short-term (single instance) |
| Tetrahydrolinalool | 78-69-3 | PNEC | 450 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| Tetrahydrolinalool | 78-69-3 | PNEC | 0,082 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| Tetrahydrolinalool | 78-69-3 | PNEC | 0,008 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| Tetrahydrolinalool | 78-69-3 | PNEC | 0,011 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| Tetrahydrolinalool | 78-69-3 | PNEC | 0,089 mg/l | aquatic organisms | freshwater | intermittent release |
| Geraniol | 106-24-1 | PNEC | 0,011 mg/l | aquatic organisms | freshwater | short-term (single instance) |
| Geraniol | 106-24-1 | PNEC | 0,001 mg/l | aquatic organisms | marine water | short-term (single instance) |
| Geraniol | 106-24-1 | PNEC | 0,7 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| Geraniol | 106-24-1 | PNEC | 0,115 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| Geraniol | 106-24-1 | PNEC | 0,011 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| Geraniol | 106-24-1 | PNEC | 0,017 mg/kg | terrestrial organisms | soil | short-term (single instance) |

### 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Use personal protective equipment with CE marking.

Eye/face protection

Wear safety glasses or face protection when there is a likelihood of exposure.

Skin protection

- Hand protection

Wear suitable gloves. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. Protective gloves should be replaced immediately if damaged or in case of signs of wear.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Thermal hazards

In case of working with hot/molten material.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| Physical state | liquid |
| Colour | colourless |
| Odour | after the perfume |
| Melting point/freezing point | not determined |
| Boiling point or initial boiling point and boiling range | 213,5 °C at 101.325 Pa |
| Flammability | product is combustible |
| Lower and upper explosion limit | information on this property is not available |
| Flash point | 21 °C |
| Auto-ignition temperature | 380 °C |
| Decomposition temperature | not relevant |
| pH (value) | 7 |
| Kinematic viscosity | not determined |

Solubility(ies)

| | |
|---|---|
| Water solubility | soluble |

Partition coefficient

| | |
|---|---|
| Partition coefficient n-octanol/water (log value) | this information is not available |

Vapour pressure

| | |
|---|---|
| Vapour pressure | 10 kPa at 143,6 °C |

Density and/or relative density

| | |
|---|---|
| Density | not determined |
| Relative vapour density | information on this property is not available |

Particle characteristics

| | |
|---|---|
| Particle characteristics | not relevant (liquid) |

### 9.2 Other information

There is no additional information.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The product is not reactive under normal conditions of storage and handling.

### 10.2 Chemical stability

It is stable under normal use and storage conditions.

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

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

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

### 10.5 Incompatible materials

There is no additional information.

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

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

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**Classification according to Regulation (EC) No 1272/2008 (CLP)**

Acute toxicity

Not classified as a mixture with acute toxicity.

**- Acute toxicity of components of the mixture**

| Name of substance | CAS No | Exposure route | Endpoint | Value | Species |
|---|---|---|---|---|---|
| 2-phenylethanol | 60-12-8 | oral | LD50 | 1.609 $^{mg}/_{kg}$ | rat |
| 2-phenylethanol | 60-12-8 | dermal | LD50 | 2.535 $^{mg}/_{kg}$ | rabbit |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | oral | LD50 | 2.000 $^{mg}/_{kg}$ | rat |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | dermal | LD50 | >2.000 $^{mg}/_{kg}$ | rabbit |

| Name of substance | CAS No | Exposure route | Endpoint | Value | Species |
|---|---|---|---|---|---|
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | oral | LD50 | 2.000 $^{mg}/_{kg}$ | rat |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | dermal | LD50 | >2.000 $^{mg}/_{kg}$ | rat |
| Coumarin | 91-64-5 | oral | LD50 | 680 $^{mg}/_{kg}$ | rat |
| Coumarin | 91-64-5 | dermal | LD50 | 293 $^{mg}/_{kg}$ | rabbit |

### Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin.

### Serious eye damage/eye irritation
Causes serious eye irritation.

### Respiratory or skin sensitisation
May cause an allergic skin reaction.

### Germ cell mutagenicity
Shall not be classified as germ cell mutagenic.

### Carcinogenicity
Shall not be classified as carcinogenic.

### Reproductive toxicity
Shall not be classified as a reproductive toxicant.

### Specific target organ toxicity - single exposure
Shall not be classified as a specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure
Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard
Shall not be classified as presenting an aspiration hazard.

## 11.2 Information on other hazards
There is no additional information.

# SECTION 12: Ecological information

## 12.1 Toxicity
Acc. to 1272/2008/EC: Harmful to aquatic life with long lasting effects.
Ordinance on facilities for handling substances hazardous to water (AwSV): WGK 2, obviously hazardous to water (Germany)

### Aquatic toxicity (acute) of components of the mixture

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|---|---|---|---|---|---|
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | LC50 | 1,34 $^{mg}/_{l}$ | fish | 96 h |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | EC50 | 1,4 $^{mg}/_{l}$ | aquatic invertebrates | 24 h |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | ErC50 | 0,77 $^{mg}/_{l}$ | algae | 72 h |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | NOEC | 0,2 $^{mg}/_{l}$ | algae | 72 h |
| Diphenyl ether | 101-84-8 | LC50 | 10 $^{mg}/_{l}$ | fish | 24 h |
| Diphenyl ether | 101-84-8 | EC50 | 2,92 $^{mg}/_{l}$ | aquatic invertebrates | 24 h |

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|---|---|---|---|---|---|
| Diphenyl ether | 101-84-8 | ErC50 | 0,58 mg/l | algae | 72 h |
| Diphenyl ether | 101-84-8 | NOEC | 3,2 mg/l | fish | 96 h |
| 2-methylundecanal | 110-41-8 | LC50 | >0,46 mg/l | fish | 24 h |
| 2-methylundecanal | 110-41-8 | EC50 | 0,21 mg/l | aquatic invertebrates | 48 h |
| 2-methylundecanal | 110-41-8 | ErC50 | 0,18 mg/l | algae | 72 h |
| 2-methylundecanal | 110-41-8 | NOEC | 0,11 mg/l | fish | 96 h |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | LC50 | 9 mg/l | zebra fish (Danio rerio) | 96 h |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | EC50 | 7,7 mg/l | daphnia magna | 48 h |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran | 1222-05-5 | LC50 | 0,95 mg/l | fish | 96 h |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran | 1222-05-5 | EC50 | 0,194 mg/l | aquatic invertebrates | 48 h |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran | 1222-05-5 | EC50 | 0,723 mg/l | algae | 72 h |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran | 1222-05-5 | ErC50 | >0,854 mg/l | algae | 72 h |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran | 1222-05-5 | NOEC | 0,201 mg/l | algae | 72 h |
| (R)-p-mentha-1,8-diene | 5989-27-5 | LC50 | 720 µg/l | fish | 96 h |
| (R)-p-mentha-1,8-diene | 5989-27-5 | EC50 | 688 µg/l | fish | 96 h |
| (R)-p-mentha-1,8-diene | 5989-27-5 | ErC50 | 0,32 mg/l | algae | 72 h |
| (R)-p-mentha-1,8-diene | 5989-27-5 | NOEC | 0,09 mg/l | algae | 48 h |

Aquatic toxicity (chronic) of components of the mixture

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|---|---|---|---|---|---|
| Benzyl acetate | 140-11-4 | EC50 | 855 mg/l | microorganisms | 3 h |
| Benzyl acetate | 140-11-4 | NOEC | 0,92 mg/l | fish | 28 d |
| 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate | 68912-13-0 | EC50 | 1,8 mg/l | aquatic invertebrates | 21 d |
| 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate | 68912-13-0 | NOEC | 0,8 mg/l | fish | 33 d |
| 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate | 68912-13-0 | growth (EbCx) 10% | 0,91 mg/l | fish | 33 d |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | NOEC | 79 µg/l | aquatic invertebrates | 21 d |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | growth (EbCx) 10% | 99 µg/l | aquatic invertebrates | 21 d |

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|---|---|---|---|---|---|
| Diphenyl ether | 101-84-8 | EC50 | >100 mg/l | microorganisms | 3 h |
| 2-methylundecanal | 110-41-8 | NOEC | 33 µg/l | aquatic invertebrates | 21 d |
| 2-methylundecanal | 110-41-8 | LOEC | 59 µg/l | aquatic invertebrates | 21 d |
| Anisaldehyde | 123-11-5 | LC50 | 1,47 mg/l | aquatic invertebrates | 21 d |
| Anisaldehyde | 123-11-5 | EC50 | 1,22 mg/l | aquatic invertebrates | 21 d |
| Anisaldehyde | 123-11-5 | NOEC | 0,71 mg/l | aquatic invertebrates | 21 d |
| Anisaldehyde | 123-11-5 | LOEC | 1,53 mg/l | aquatic invertebrates | 21 d |
| Anisaldehyde | 123-11-5 | growth (EbCx) 20% | 450 mg/l | microorganisms | 30 min |
| 3-p-cumenyl-2-methylpropionaldehyde | 103-95-7 | EC50 | 1,7 mg/l | aquatic invertebrates | 21 d |
| 3-p-cumenyl-2-methylpropionaldehyde | 103-95-7 | NOEC | 0,71 mg/l | aquatic invertebrates | 21 d |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran | 1222-05-5 | LC50 | >0,14 mg/l | fish | 36 d |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran | 1222-05-5 | EC50 | 0,282 mg/l | aquatic invertebrates | 21 d |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran | 1222-05-5 | NOEC | 0,068 mg/l | fish | 36 d |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran | 1222-05-5 | LOEC | 0,075 mg/l | aquatic invertebrates | 5,5 d |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran | 1222-05-5 | growth (EbCx) 10% | 0,044 mg/l | aquatic invertebrates | 5,5 d |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | LC50 | 7,5 mg/l | rainbow trout (Oncorhynchus mykiss) | 3 h |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | EC50 | 190 mg/l | microorganisms | 3 h |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | NOEC | 0,426 mg/l | fish | 33 d |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | growth (EbCx) 10% | 5,2 mg/l | algae | 72 h |

### 12.2 Persistence and degradability

Information on this property is not available.

Degradability of components

| Name of substance | CAS No | Process | Degradation rate | Time | Method | Source |
|---|---|---|---|---|---|---|
| Benzyl acetate | 140-11-4 | carbon dioxide generation | 100,9 % | 28 d | | ECHA |
| 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate | 68912-13-0 | oxygen depletion | 15 % | 28 d | | ECHA |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | oxygen depletion | 32 % | 2 d | | ECHA |
| Diphenyl ether | 101-84-8 | oxygen depletion | 64 % | 5 d | | ECHA |
| 2-methylundecanal | 110-41-8 | oxygen depletion | 11 % | 2 d | | ECHA |
| Anisaldehyde | 123-11-5 | DOC removal | 97 % | 6 d | | ECHA |
| 3-p-cumenyl-2-methylpropionaldehyde | 103-95-7 | carbon dioxide generation | 65,5 % | 28 d | | ECHA |
| Ethyllinalool | 10339-55-6 | oxygen depletion | 6 % | 4 d | | ECHA |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | oxygen depletion | 51,52 % | 28 d | | ECHA Chem |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran | 1222-05-5 | carbon dioxide generation | 1 % | 28 d | | ECHA |
| Eugenol | 97-53-0 | oxygen depletion | 50 % | 7 d | | ECHA |
| Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol | 5502-75-0 | oxygen depletion | 91 % | 28 d | | ECHA Chem |
| Tetrahydrolinalool | 78-69-3 | oxygen depletion | 60 – 70 % | 28 d | OECD 301 F | ECHA |
| Geraniol | 106-24-1 | DOC removal | 90 – 100 % | 3 d | | ECHA |

## 12.3 Bioaccumulative potential

Bioaccumulative potential of components of the mixture

| Name of substance | CAS No | BCF | Log KOW |
|---|---|---|---|
| Benzyl acetate | 140-11-4 | 8 | 1,96 (pH value: 7, 25 °C) |
| 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate | 68912-13-0 | 156 | 4,4 (30 °C) |
| 2-phenylethanol | 60-12-8 | | 1,36 |
| 2-methylbutyl 2-hydroxybenzoate; pentyl 2-hydroxybenzoate | | 1.136 | 4,4 (30 °C) |
| 4-tert-butylcyclohexyl acetate | 32210-23-4 | 234 | 4,8 (25 °C) |
| Diphenyl ether | 101-84-8 | 196 | 4,21 (25 °C) |
| 2-methylundecanal | 110-41-8 | | 4,9 (35 °C) |

| Name of substance | CAS No | BCF | Log KOW |
|---|---|---|---|
| Anisaldehyde | 123-11-5 | | 1,56 (25 °C) |
| 3-p-cumenyl-2-methylpropionaldehyde | 103-95-7 | | 3,4 (pH value: ~7, 35 °C) |
| 7-hydroxycitronellal | 107-75-5 | | 1,68 (25 °C) |
| Ethyllinalool | 10339-55-6 | | 3,3 (20 °C) |
| (2E)-3-phenylprop-2-en-1-ol | 104-54-1 | | 1,452 (25 °C) |
| 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexa-methylindeno[5,6-c]pyran | 1222-05-5 | 1.635 | 5,3 (pH value: 7, 25 °C) |
| (R)-p-mentha-1,8-diene | 5989-27-5 | 361 | |
| Eugenol | 97-53-0 | | 1,83 (pH value: 5,5, 30 °C) |
| Reaction Mass of Cis-4-(isopropyl)cyclohex-anemethanol and Trans-4-(isopropyl)cyclo-hexanemethanol | 5502-75-0 | | 3,55 (30 °C) |
| Tetrahydrolinalool | 78-69-3 | 99,87 | 3,3 (20 °C) |
| Geraniol | 106-24-1 | | 2,6 (25 °C) |

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0,1%.

### 12.6 Endocrine disrupting properties

Information not available.

### 12.7 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Dispose of contents/container to a facility in accordance with local and national regulations. Waste should be recovered or disposed of in authorized incineration plants or waste facilities in accordance with applicable regulations.

Waste treatment-relevant information

Solvent reclamation/regeneration.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

Use appropriate container to avoid environmental contamination. Only packagings which are approved (e.g. acc. to ADR) may be used.

**Remarks**

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. If this product and its packaging become waste, the owner of the waste is obliged to assign the corresponding code to the waste according to the decree on the creation of the Catalog of waste.

## SECTION 14: Transport information

### 14.1 UN number or ID number

| | |
|---|---|
| ADR/RID/ADN | UN 1993 |
| IMDG-Code | UN 1993 |
| ICAO-TI | UN 1993 |

### 14.2 UN proper shipping name

| | |
|---|---|
| ADR/RID/ADN | FLAMMABLE LIQUID, N.O.S. |
| IMDG-Code | FLAMMABLE LIQUID, N.O.S. |
| ICAO-TI | Flammable liquid, n.o.s. |
| Technical name (hazardous ingredients) | Ethanol, Reaction Mass of Cis-4-(isopropyl)cyclohexanemethanol and Trans-4-(isopropyl)cyclohexanemethanol |

### 14.3 Transport hazard class(es)

| | |
|---|---|
| ADR/RID/ADN | 3 |
| IMDG-Code | 3 |
| ICAO-TI | 3 |

### 14.4 Packing group

| | |
|---|---|
| ADR/RID/ADN | II |
| IMDG-Code | II |
| ICAO-TI | II |

### 14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

### 14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

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

The cargo is not intended to be carried in bulk.

**Information for each of the UN Model Regulations**

**Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information**

| | |
|---|---|
| Classification code | F1 |
| Danger label(s) | 3 |


| | |
|---|---|
| Special provisions (SP) | 274, 601, 640D |
| Excepted quantities (EQ) | E2 |
| Limited quantities (LQ) | 1 L |
| Transport category (TC) | 2 |
| Tunnel restriction code (TRC) | D/E |
| Hazard identification No | 33 |

**International Maritime Dangerous Goods Code (IMDG) - Additional information**

| | |
|---|---|
| Marine pollutant | - |
| Danger label(s) | 3 |


| | |
|---|---|
| Special provisions (SP) | 274 |

| | |
|---|---|
| Excepted quantities (EQ) | E2 |
| Limited quantities (LQ) | 1 L |
| EmS | F-E, S-E |
| Stowage category | B |

**International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information**

| | |
|---|---|
| Danger label(s) | 3 |

| | |
|---|---|
| Special provisions (SP) | A3 |
| Excepted quantities (EQ) | E2 |
| Limited quantities (LQ) | 1 L |

## SECTION 15: Regulatory information

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

**Relevant provisions of the European Union (EU)**

Regulation of the European Parliament and of the Council (EC) No. 1907/2006 (REACH) as amended,
Regulation of the European Parliament and of the Council (EC) No. 1272/2008 (CLP) as amended.

**Restrictions according to REACH, Annex XVII**

The product and listed ingredients are subject to the following restrictions, according to REACH Annex XVII. None of these restrictions are applicable for the identified use of the product

Dangerous substances with restrictions (REACH, Annex XVII)

| Name of substance | Name acc. to inventory | CAS No | Restriction | No |
|---|---|---|---|---|
| Room Scent Cotton Flower | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC | | R3 | 3 |
| Ethanol | flammable / pyrophoric | | R40 | 40 |
| Ethanol | substances in tattoo inks and permanent make-up | | R75 | 75 |
| Diphenyl ether | substances in tattoo inks and permanent make-up | | R75 | 75 |
| 3-p-cumenyl-2-methylpropionaldehyde | substances in tattoo inks and permanent make-up | | R75 | 75 |
| Heptanal, 2-(phenylmethylene)-, (2E)- | substances in tattoo inks and permanent make-up | | R75 | 75 |
| (R)-p-mentha-1,8-diene | flammable / pyrophoric | | R40 | 40 |
| (R)-p-mentha-1,8-diene | substances in tattoo inks and permanent make-up | | R75 | 75 |
| p-mentha-1,4(8)-diene | substances in tattoo inks and permanent make-up | | R75 | 75 |
| Geraniol | substances in tattoo inks and permanent make-up | | R75 | 75 |

Legend

R3 1. Shall not be used in:
- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects,

Legend

2. Articles not complying with paragraph 1 shall not be placed on the market.
3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
— can be used as fuel in decorative oil lamps for supply to the general public, and
— present an aspiration hazard and are labelled with H304.
4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
5. Without prejudice to the implementation of other Union provisions relating to the classification, labelling and packaging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
(a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: “Keep lamps filled with this liquid out of the reach of children”; and, by 1 December 2010, “Just a sip of lamp oil – or even sucking the wick of lamps – may lead to life-threatening lung damage”;
(b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: ‘Just a sip of grill lighter fluid may lead to life threatening lung damage’;
(c) lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.’;

R40 1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:
- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- ‘whoopee’ cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.
2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:
‘For professional users only’.
3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC (2).
4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

R75 1. Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such substances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is or are present in the following circumstances:
(a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
(b) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive toxicant category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
(c) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser category 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
(d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the substance is present in the mixture in a concentration equal to or greater than:
(i) 0,1 % by weight, if the substance is used solely as a pH regulator;
(ii) 0,01 % by weight, in all other cases;
(e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (*1), the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
(f) in the case of a substance for which a condition of one or more of the following kinds is specified in column g (Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight:
(i) “Rinse-off products”;
(ii) “Not to be used in products applied on mucous membranes”;
(iii) “Not to be used in eye products”;
(g) in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for use preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration, or in some other way, that does not accord with the condition specified in that column;
(h) in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a concentration equal to or greater than the concentration limit specified for that substance in that Appendix.
2. For the purposes of this entry use of a mixture “for tattooing purposes” means injection or introduction of the mixture into a person’s skin, mucous membrane or eyeball, by any process or procedure (including procedures commonly referred to as permanent make-up, cosmetic tattooing, micro-blading and micro-pigmentation), with the aim of making a mark or design on his or her body.
3. If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictest concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of paragraph 1 shall apply to that substance.
4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:
(a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);
(b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).
5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a substance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the date of application of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect on the date of application of that new or revised classification.
6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the listing of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or such that it then falls within a different

Legend

one of those points from the one within which it fell previously, and the amendment takes effect after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from the date falling 18 months after entry into force of the act by which that amendment was made.
7. Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022, the mixture is marked with the following information:
(a) the statement “Mixture for use in tattoos or permanent make-up”;
(b) a reference number to uniquely identify the batch;
(c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients shall be listed in descending order by weight or volume of the ingredients at the time of formulation. “Ingredient” means any substance added during the process of formulation and present in the mixture for use for tattooing purposes. Impurities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning of this entry, is already required to be stated on the label in accordance with Regulation (EC) No 1272/2008, that ingredient does not need to be marked in accordance with this Regulation;
(d) the additional statement “pH regulator” for substances falling under point (d)(i) of paragraph 1;
(e) the statement "Contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentration limit specified in Appendix 13;
(f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) below the concentration limit specified in Appendix 13;
(g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) No 1272/2008.
The information shall be clearly visible, easily legible and marked in a way that is indelible.
The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise.
Where necessary because of the size of the package, the information listed in the first subparagraph, except for point (a), shall be included instead in the instructions for use.
Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing the procedure with the information marked on the package or included in the instructions for use pursuant to this paragraph.
8. Mixtures that do not contain the statement “Mixture for use in tattoos or permanent make-up” shall not be used for tattooing purposes.
9. This entry does not apply to substances that are gases at temperature of 20 °C and pressure of 101,3 kPa, or generate a vapour pressure of more than 300 kPa at temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).
10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use of a mixture for tattooing purposes, when placed on the market exclusively as a medical device or an accessory to a medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or an accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclusively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and of this Regulation shall apply cumulatively.

### List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

none of the ingredients are listed

### Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

### Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

### National regulations (Germany)

### Ordinance on facilities for handling substances hazardous to water (AwSV)

Wassergefährdungsklasse, WGK (water hazard class) 2 obviously hazardous to water

### Technical instructions on air quality control (Germany)

| Number | Group of substances | Class | Conc. | Mass flow | Mass concentration | Notation |
|---|---|---|---|---|---|---|
| 5.2.5 | organic substances | | ≥ 25 wt% | 0,5 $^{kg}/_{h}$ | 50 $^{mg}/_{m^3}$ | 3) |

Notation

3) a total mass flow of 0.50 kg/h or a total mass concentration of 50 mg/m³, each of which to be indicated as total carbon, shall not be exceeded (except organic particulate matter)

### Storage of hazardous substances in non-stationary containers (TRGS 510) (Germany)

Storage class (LGK) 3 (flammable or desensitizing explosive liquids)

## 15.2 Chemical safety assessment

A chemical safety assessment has been performed for substances with a REACH registration number.

## SECTION 16: Other information

### Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|---|---|
| 2017/164/EU | Commission Directive establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU |
| Acute Tox. | Acute toxicity |
| ADN | Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) |
| ADR | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road) |
| ADR/RID/ADN | Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN) |
| AGW | Workplace exposure limit |
| Aquatic Acute | Hazardous to the aquatic environment - acute hazard |
| Aquatic Chronic | Hazardous to the aquatic environment - chronic hazard |
| Asp. Tox. | Aspiration hazard |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures |
| DFG | Deutsche Forschungsgemeinschaft MAK-und BAT-Werte-Liste, Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Wiley-VCH, Weinheim |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| DNEL | Derived No-Effect Level |
| EC50 | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval |
| EC No | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union) |
| ED | Endocrine disruptor |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| EmS | Emergency Schedule |
| ErC50 | ≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control |
| Eye Dam. | Seriously damaging to the eye |
| Eye Irrit. | Irritant to the eye |
| Flam. Liq. | Flammable liquid |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| ICAO-TI | Technical instructions for the safe transport of dangerous goods by air |
| IMDG | International Maritime Dangerous Goods Code |
| IMDG-Code | International Maritime Dangerous Goods Code |

| Abbr. | Descriptions of used abbreviations |
|---|---|
| index No | The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 |
| IOELV | Indicative occupational exposure limit value |
| LC50 | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval |
| LD50 | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval |
| LGK | Lagerklasse (storage class according to TRGS 510, Germany) |
| LOEC | Lowest Observed Effect Concentration |
| log KOW | n-Octanol/water |
| M-factor | Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present |
| NLP | No-Longer Polymer |
| NOEC | No Observed Effect Concentration |
| PBT | Persistent, Bioaccumulative and Toxic |
| PNEC | Predicted No-Effect Concentration |
| ppm | Parts per million |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| Repr. | Reproductive toxicity |
| RID | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail) |
| Skin Corr. | Corrosive to skin |
| Skin Irrit. | Irritant to skin |
| Skin Sens. | Skin sensitisation |
| STEL | Short-term exposure limit |
| SVHC | Substance of Very High Concern |
| TRGS | Technische Regeln für Gefahrstoffe (technical rules for hazardous substances, Germany) |
| TRGS 900 | Arbeitsplatzgrenzwerte (TRGS 900) |
| TWA | Time-weighted average |
| vPvB | Very Persistent and very Bioaccumulative |

### Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H361fd | Suspected of damaging fertility. Suspected of damaging 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. |

### Training advice

Training recommendations: Workers must be aware of handling risks and health and environmental protection requirements.

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.