FR GIOIA

Revision nr. 2 Dated 28/04/2022 Printed on 28/04/2022 Page n. 1/21

Replaced revision:1 (Dated: 22/04/2022)

Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH This Safety Data Sheet cancels and replaces all preceding SDS for this product.

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Code: CM1038 FR GIOIA Product name

Essence in hydro-alcoholic solution Chemical name and synonym

SU50-C0YU-S00Q-NPHE UFI:

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

Perfume for the environment Intended use

Identified Uses Industrial Professional Consumer Consumer use

Uses Advised Against

Not to be used as a personal perfume.

1.3. Details of the supplier of the safety data sheet

Name **CULTI MILANO SpA** Full address Via dell'Aprica, 12 District and Country 20158 Milano (MI)

Italy

Tel. +39 02/49784974 Fax +39 02/49789135

e-mail address of the competent person

culti@culti.com responsible for the Safety Data Sheet

1.4. Emergency telephone number

For urgent inquiries refer to

CULTI MILANO SpA - Tel. +39 02/49784974 (Contact from Monday to Friday from 8.30 / 12.30 AM- 1.30 / 6.00 PM)

ITALIAN POISON CENTER

Ospedale Niguarda Cà Granda - Milano Tel. +39 02/66101029

CAV Centro Nazionale Informazione Tossicologica - Pavia Tel. +39 0382/24444 Centro Antiveleni Bergamo - +39 80011858 (CAV Ospedali Riuniti - Bergamo)

Centro Antiveleni Verona - +39 800011858 (Azienda Ospedaliera Integrata - Verona)
Centro Antiveleni Firenze - Tel. +39 055/7947819 (Azienda Ospedaliera 'Careggi' U.O. Tossicologia Medica-Firenze)

Centro Antiveleni Roma - Tel. +39 06/3054343 (CAV Policlinico Gemelli - Roma)

Centro Antiveleni Roma - Tel. +39 06/49978000 (CAV Policlinico Umberto I - Roma)
Centro Antiveleni Roma - Tel. +39 06/68593726 (CAV Osp.Pediatrico 'Bambino Gesù' DEA - Roma)

Centro Antiveleni Napoli - Tel. +39 081/7472870 (CAV Ospedale Cardarelli - Napoli)

Centro Antiveleni Foggia - Tel. +39 800183459 (CAV Az. Osp. Univ. Foggia - Foggia)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 2

H225

Highly flammable liquid and vapour.

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Eye irritation, category 2 Skin sensitization, category 1A H319 H317 Causes serious eye irritation. May cause an allergic skin reaction.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:





Signal words:

Danger

Hazard statements:

H225Highly flammable liquid and vapour.H319Causes serious eye irritation.H317May cause an allergic skin reaction.

Precautionary statements:

P501 Dispose of contents / container to local rulements.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/ protective clothing / eye protection / face protection.
P101 If medical advice is needed, have product container or label at hand.

P370+P378 In case of fire: use chemical extinguisher to extinguish.

P102 Keep out of reach of children.

Contains: Cinnamal

(R)-P-MENTHA-1,8-DIENE

Linalool

Linalyl acetate

Citral

Benzene, 1-Methoxy-4- (1-Propenyl) -, (E) -2-Propenal, 2-Methyl-3-Phenyl-, (2e) -

Cinnamyl alcohol

Eucalyptol Coumarin Eugenol

PACK2 The packing must have tactive indications of danger for blind people.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%. The product does not contain substances with endocrine disrupting properties in concentration >= 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

| CU | LTI | MII | LAN | 10 | SpA |
|----|-----|-----|-----|----|-----|
|----|-----|-----|-----|----|-----|

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| Identification | x = Conc. % | Classification (EC) 1272/2008 (CLP) |
|--|--------------------|---|
| ETHANOL | | FI |
| CAS 64-17-5 | $86 \le x < 90$ | Flam. Liq. 2 H225, Eye Irrit. 2 H319 |
| EC 200-578-6 | | |
| INDEX 603-002-00-5 | | |
| REACH Reg. 01-2119457610-43-0000 | | |
| Propyl (2s) -2- (1,1-Dimethylpropoxy) - propanoate CAS 319002-92-1 | 2,5 ≤ x < 3 | Aquatic Chronic 3 H412 |
| EC 437-530-0 | | |
| INDEX - | | |
| REACH Reg. 01-0000018277-65 | | |
| (R)-P-MENTHA-1,8-DIENE | | |
| CAS 5989-27-5 | 1 ≤ x < 1,5 | Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 3 H412 |
| EC 227-813-5 | | |
| INDEX 601-096-00-2 | | |
| REACH Reg. 01-2119529223-47 | | |
| Coumarin | | |
| CAS 91-64-5 | $0.5 \le x < 0.6$ | Acute Tox. 4 H302, Skin Sens. 1B H317 |
| EC 202-086-7 | | STA Oral: 500 mg/kg |
| INDEX - | | |
| REACH Reg. 01-2119949300-45-0000 | | |
| Cinnamal | | |
| CAS 104-55-2 | $0.5 \le x < 0.6$ | Acute Tox. 4 H312, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1A H317, Aquatic Chronic 3 H412 |
| EC 203-213-9 INDEX - | | LD50 Dermal: 1260 mg/kg |
| REACH Reg. 01-2119935242-45-0000 | | |
| Eugenol | | |
| CAS 97-53-0 | $0.5 \le x < 0.6$ | Eye Irrit. 2 H319, Skin Sens. 1B H317 |
| EC 202-589-1 | 5,5 = X 5,5 | |
| INDEX - | | |
| REACH Reg. 01-2119971802-33-0000 | | |
| Cinnamyl alcohol | | |
| CAS 104-54-1 | $0.2 \le x < 0.25$ | Acute Tox. 4 H302, Skin Sens. 1B H317 |
| EC 203-212-3 | -,, | LD50 Oral: 2000 mg/kg |
| INDEX - | | 3 3 |
| REACH Reg. 01-2119934496-29 | | |
| Eucalyptol | | |
| CAS 470-82-6 | $0.2 \le x < 0.25$ | Flam. Liq. 3 H226, Eye Irrit. 2 H319, Skin Sens. 1B H317 |
| EC 207-431-5 | 0,2 = X · 0,20 | Traini. Elq. 6 Trees, Eye init. 2 Trees, Gilli Gene. 15 Trees |
| INDEX - | | |
| REACH Reg. 01-2119967772-24-0000 | | |
| 2-Propenal, 2-Methyl-3-Phenyl-, (2e) - | | |
| CAS 15174-47-7 | 0,15 ≤ x < 0,2 | Skin Sens. 1B H317 |
| | 5,15 = X + 0,2 | |

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EC 701-219-0

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REACH Reg. 01-2119538797-21

Benzene, 1-Methoxy-4- (1-Propenyl) -, (E) -

CAS 4180-23-8 0,15 ≤ x < 0,2 Skin Sens. 1B H317

EC 224-052-0

INDEX -

REACH Reg. 01-2119979097-22

Linalyl acetate

CAS 115-95-7 0,15 ≤ x < 0,2 Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317

EC 204-116-4

INDEX -

REACH Reg. 01-2119983608-21-0000

Linalool

CAS 78-70-6 0.15 ≤ x < 0.2 Eve Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317

EC 201-134-4

INDEX 603-235-00-2

REACH Reg. 01-2119474016-42-0000

Citral

CAS 5392-40-5 0,15 ≤ x < 0,2 Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317

EC 226-394-6

INDEX 605-019-00-3

REACH Reg. 01-2119462829-23-0000

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHĂLATĬON: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately. INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available.

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

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5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

FRA France Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS GBR United Kingdom EH40/2005 Workplace exposure limits (Fourth Edition 2020)

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TLV-ACGIH

ACGIH 2021

| Туре | Country | TWA/8h | | STEL/15min | | Remarks / | | |
|--|--|----------------|---------------|---|--|--|---------------|------------------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | Observation | ons | |
| /LEP | FRA | 1900 | 1000 | 9500 | 5000 | | | |
| WEL | GBR | 1920 | 1000 | | | | | |
| TLV-ACGIH | | | | 1884 | 1000 | | | |
| Predicted no-effect concentra | ation - PNEC | | | | | | | |
| Normal value in fresh water | | | | 0.96 | mg/ | /1 | | |
| Normal value in marine wate | <u> </u> | | | 0,79 | mg/ | | | |
| Normal value for fresh water | | | | 3,6 | | /kg/d | | |
| Normal value for marine water | | | | 2,9 | | /kg/d | | |
| | | | | | | | | |
| Normal value for water, inter | | | | 2,75 | mg/ | | | |
| Normal value of STP microor | | | | 580 | mg/ | 'I | | |
| Health - Derived no-effe | ect level - DNEL / I Effects on | DMEL | | | Effects on | | | |
| | consumers | | 01 : 1 1 | | workers | Α | <u> </u> | 01 : |
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| nhalation | | | | 950 mg/m3 | | 1884 mg/m3 | | |
| Skin | | | | | | | | 343 mg/kg/ |
| Propyl (2s) -2- (1,1-Dime Predicted no-effect concentra | ethylpropoxy) -pro ation - PNEC | opanoate | | | | | | |
| Predicted no-effect concentra | ethylpropoxy) -pro ation - PNEC | opanoate | | 0,013 | mg/ | /1 | | |
| Propyl (2s) -2- (1,1-Dime Predicted no-effect concentrations Normal value in fresh water Normal value in marine wate | ation - PNEC | opanoate | | 0,013 0,0013 | mg/ mg/ | | | |
| Predicted no-effect concentration Normal value in fresh water Normal value in marine wate | ation - PNEC | opanoate | | | mg/ | | | |
| Predicted no-effect concentrations Normal value in fresh water Normal value in marine water Normal value for fresh water | r sediment | opanoate | | 0,0013 | mg/ | /I | | |
| Predicted no-effect concentrations and value in fresh water Normal value in marine water Normal value for fresh water Normal value for marine water | r sediment | opanoate | | 0,0013 | mg/ | /l /kg/d /kg/d | | |
| Predicted no-effect concentrations and value in fresh water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value of STP microor | r sediment ganisms | opanoate | | 0,0013 0,117 0,012 | mg/ mg/ mg/ mg/ | /l /kg/d /kg/d | | |
| Predicted no-effect concentration Normal value in fresh water | r sediment ganisms al compartment ect level - DNEL / I | | | 0,0013 0,117 0,012 10 | mg/ mg/ mg/ mg/ | /I /kg/d /kg/d | | |
| Predicted no-effect concentration Normal value in fresh water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value of STP microor Normal value for the terrestricted in the service of the service | r sediment er sediment ganisms al compartment | | Chronic local | 0,0013 0,117 0,012 10 0,016 | mg/ mg/ mg/ mg/ | /l /kg/d /kg/d /l /kg/d | Chronic local | Chronic |
| Predicted no-effect concentrations and value in fresh water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value for marine water Normal value for the terrestricted the Normal value for the Normal value for the terrestricted the Normal value for the Normal v | sediment er sediment ganisms al compartment ect level - DNEL / I Effects on consumers | DMEL | Chronic local | 0,0013 0,117 0,012 10 0,016 | mg/ mg/ mg/ mg/ Effects on workers | /l /kg/d /kg/d /l | Chronic local | Chronic systemic |
| Predicted no-effect concentrations and value in fresh water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value of STP microor Normal value for the terrestricted the Normal value for marine water Normal value for the terrestricted the Normal value for the Normal value | sediment er sediment ganisms al compartment ect level - DNEL / I Effects on consumers | DMEL | Chronic local | 0,0013 0,117 0,012 10 0,016 Chronic systemic 1,25 mg/kg bw/d | mg/ mg/ mg/ mg/ Effects on workers | /l /kg/d /kg/d /l /kg/d | Chronic local | systemic |
| Predicted no-effect concentrations and value in fresh water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value for marine water Normal value for the terrestricted the Derived no-effect Route of exposure Dral Inhalation | sediment er sediment ganisms al compartment ect level - DNEL / I Effects on consumers | DMEL | Chronic local | 0,0013 0,117 0,012 10 0,016 Chronic systemic 1,25 mg/kg bw/d 2,17 mg/m3 | mg/ mg/ mg/ mg/ Effects on workers | /l /kg/d /kg/d /l /kg/d | Chronic local | systemic 8,8 mg/m3 |
| Predicted no-effect concentrations and value in fresh water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value for marine water Normal value for the terrestricted the Derived no-effect Route of exposure Dral Inhalation | sediment er sediment ganisms al compartment ect level - DNEL / I Effects on consumers | DMEL | Chronic local | 0,0013 0,117 0,012 10 0,016 Chronic systemic 1,25 mg/kg bw/d | mg/ mg/ mg/ mg/ Effects on workers | /l /kg/d /kg/d /l /kg/d | Chronic local | systemic |
| Predicted no-effect concentrations and value in fresh water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value for marine water Normal value for the terrestricted the Derived no-effect Route of exposure Dral Inhalation | sediment er sediment ganisms al compartment ect level - DNEL / I Effects on consumers | DMEL | Chronic local | 0,0013 0,117 0,012 10 0,016 Chronic systemic 1,25 mg/kg bw/d 2,17 mg/m3 1,25 mg/kg | mg/ mg/ mg/ mg/ Effects on workers | /l /kg/d /kg/d /l /kg/d | Chronic local | systemic 8,8 mg/m3 2,5 mg/kg |
| Predicted no-effect concentrations and value in fresh water Normal value in marine water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value for the terrestriction of the terrestriction of the value of exposure Oral Inhalation Eugenol | r sediment er sediment eganisms al compartment ettlevel - DNEL / I Effects on consumers Acute local | DMEL | Chronic local | 0,0013 0,117 0,012 10 0,016 Chronic systemic 1,25 mg/kg bw/d 2,17 mg/m3 1,25 mg/kg | mg/ mg/ mg/ mg/ Effects on workers | /l /kg/d /kg/d /l /kg/d | Chronic local | systemic 8,8 mg/m3 2,5 mg/kg |
| Predicted no-effect concentrations and concentrations are seen to the concentration of the co | r sediment er sediment eganisms al compartment ettlevel - DNEL / I Effects on consumers Acute local | DMEL | Chronic local | 0,0013 0,117 0,012 10 0,016 Chronic systemic 1,25 mg/kg bw/d 2,17 mg/m3 1,25 mg/kg | mg/ mg/ mg/ mg/ Effects on workers | /l /kg/d /kg/d /l /kg/d Acute systemic | Chronic local | systemic 8,8 mg/m3 2,5 mg/kg |
| Predicted no-effect concentrations and value in fresh water Normal value in marine water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value of STP microor Normal value for the terrestricted the Derived no-effect Route of exposure Dral Inhalation Skin Eugenol Predicted no-effect concentrations water Normal value in fresh water | setion - PNEC r sediment er sediment ganisms al compartment ect level - DNEL / I Effects on consumers Acute local | DMEL | Chronic local | 0,0013 0,117 0,012 10 0,016 Chronic systemic 1,25 mg/kg bw/d 2,17 mg/m3 1,25 mg/kg bw/d | mg/ mg/ mg/ mg/ Effects on workers Acute local | /kg/d /kg/d /kg/d /kg/d /kg/d Acute systemic | Chronic local | systemic 8,8 mg/m3 2,5 mg/kg |
| Predicted no-effect concentrations and value in fresh water Normal value in marine water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value for marine water Normal value of STP microor Normal value for the terrestricted of the exposure Oral Inhalation Skin Eugenol Predicted no-effect concentrations and value in fresh water Normal value in marine water | r sediment er sediment ganisms al compartment ect level - DNEL / I Effects on consumers Acute local | DMEL | Chronic local | 0,0013 0,117 0,012 10 0,016 Chronic systemic 1,25 mg/kg bw/d 2,17 mg/m3 1,25 mg/kg bw/d 0,0013 | mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/m | /kg/d /kg/d /kg/d /kg/d /kg/d Acute systemic | Chronic local | systemic 8,8 mg/m3 2,5 mg/kg |
| Predicted no-effect concentrations and value in fresh water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value for marine water Normal value of STP microor Normal value for the terrestri- | sediment er sediment ganisms al compartment Effects on consumers Acute local | DMEL | Chronic local | 0,0013 0,117 0,012 10 0,016 Chronic systemic 1,25 mg/kg bw/d 2,17 mg/m3 1,25 mg/kg bw/d 0,0013 113 | mg/ | // // // // // // // // // // // // // | Chronic local | systemic 8,8 mg/m3 2,5 mg/kg |

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| | Effects on | | | | Effects on | | | |
|---|-----------------------------------|----------------|---------------|----------------------------|---------------------|-------------------|---------------|--------------------|
| Route of exposure | consumers Acute local | Acute systemic | Chronic local | Chronic | workers Acute local | Acute | Chronic local | Chronic |
| Dral | | | | systemic 3 mg/kg bw/d | | systemic | | systemic |
| nhalation | | | | 5,22 mg/m3 | | | | 21,2 mg/m3 |
| Skin | | | | 3,22 mg/m3 3 mg/kg bw/d | | | | 6 mg/kg bw |
| SKIII | | | | 3 mg/kg bw/u | | | | o mg/kg bw/ |
| Cinnamal | | | | | | | | |
| Predicted no-effect concentrate | tion - PNEC | | | | | | | |
| Normal value in fresh water | | | | 0,008 | mç | g/l | | |
| Normal value in marine water | | | | 800 | ng | /L | | |
| Normal value for fresh water s | sediment | | | 0,101 | m | g/kg/d | | |
| Normal value for marine water | r sediment | | | 0,0101 | m | g/kg/d | | |
| Normal value for water, interm | nittent release | | | 0,00321 | mç | g/l | | |
| Normal value of STP microorg | ganisms | | | 7,1 | m | g/l | | |
| Normal value for the terrestria | I compartment | | | 0,0156 | m | g/kg/d | | |
| Health - Derived no-effect | | OMEL | | | Effects on | | | |
| | Effects on consumers | | | | workers | | | |
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | | 0,625 mg/kg bw/d | | oyotoc | | Cycloniic |
| Inhalation | | | | 0,543 mg/m3 | | | | 2,204 mg/m |
| Skin | | | | 0,625 mg/kg bw/d | | | | 1,75 mg/kg bw/d |
| Coumarin | . DNEO | | | | | | | |
| Predicted no-effect concentration | tion - PNEC | | | | | | | |
| Normal value in fresh water | | | | 0,019 | m | | | |
| Normal value in marine water | | | | 0,0019 | m | | | |
| Normal value for fresh water s | sediment | | | 0,15 | m | g/kg/d | | |
| Normal value for marine water | r sediment | | | 0,015 | mį | g/kg/d | | |
| Normal value of STP microorg | ganisms | | | 6,4 | m | g/l | | |
| Normal value for the terrestria | l compartment | | | 0,018 | mç | g/kg/d | | |
| Health - Derived no-effect | et level - DNEL / D Effects on | OMEL | | | Effects on | | | |
| | consumers | | | | workers | | | |
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Inhalation | | | | 1,69 mg/m3 | | | | 6,78 mg/m3 |
| Skin | | | | 0,390 mg/kg | | | | 0,790 mg/kg |
| | | | | bw/d | | | | bw/d |
| Eucalyptol | tion DNEO | | | | | | | |
| Predicted no-effect concentration | uon - PNEC | | | 0.057 | | // | | |
| Normal value in fresh water | | | | 0,057 | m | - | | |
| Normal value in marine water | | | | 0,0057 | m | | | |
| | a alima a m t | | | 1,425 | mo | g/kg/d | | |
| Normal value for fresh water s Normal value for marine water | | | | 0,1425 | | | | |

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| | anisms | | | 10 | mg | 1 /I | | |
|--|---|-----------------|---------------|--|-----------------------------|--|---------------|------------------------|
| Normal value for the terrestrial | compartment | | | 0,25 | mg | ı/kg/d | | |
| Health - Derived no-effec | Effects on consumers | OMEL | | | Effects on workers | | | |
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | | 600 mg/kg bw/d | | | | |
| Inhalation | | | | 1,74 mg/m3 | | | | 7,05 mg/m3 |
| Skin | | | | 1 mg/kg bw/d | | | | 2 mg/kg bw/ |
| Cinnamyl alcohol | | | | | | | | |
| Predicted no-effect concentrati | ion - PNEC | | | | | | | |
| Normal value in fresh water | | | | 0,0077 | mg | ı/l | | |
| Normal value in marine water | | | | 770 | ng/ | /L | | |
| Normal value for fresh water se | ediment | | | 0,118 | mg | J/kg/d | | |
| Normal value for marine water | sediment | | | 0,0118 | mg | ı/kg/d | | |
| Normal value for water, intermi | ittent release | | | 0,0077 | mg | ı/l | | |
| Normal value of STP microorga | anisms | | | 16,127 | mg | 1/ I | | |
| Normal value for the terrestrial | compartment | | | 0,019 | mg | ı/kg/d | | |
| Health - Derived no-effec | t level - DNEL / I Effects on consumers | OMEL | | | Effects on workers | | | |
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic | Acute local | Acute | Chronic local | Chronic |
| Inhalation | | | | systemic 0,465 mg/m3 | | systemic | | systemic 2,64 mg/m3 |
| Skin | | | | 0,268 mg/kg | | | | 0,749 mg/kg |
| | | | | bw/d | | | | bw/d |
| Citral Threshold Limit Value | | | | bw/d | | | | bw/d |
| Threshold Limit Value | Country | TWA/8h | | STEL/15min | | Remarks | | bw/d |
| Threshold Limit Value | Country | TWA/8h mg/m3 | ppm | | ppm | Remarks Observa | | bw/d |
| Threshold Limit Value Type | Country | | ppm 5 | STEL/15min | ppm | | tions | , DSEN, A4 |
| Threshold Limit Value Type TLV-ACGIH | | | | STEL/15min | ppm | Observa | tions | |
| Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentration | | | | STEL/15min | ppm | Observa SKIN | tions | |
| Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrati Normal value in fresh water | | | | STEL/15min mg/m3 | | Observa SKIN | tions | |
| Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrati Normal value in fresh water Normal value in marine water | ion - PNEC | | | STEL/15min mg/m3 | mg ng/ | Observa SKIN | tions | |
| Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrati Normal value in fresh water Normal value in marine water | ion - PNEC | | | STEL/15min mg/m3 0,00678 678 0,125 | mg ng, mg | Observa SKIN y/I //L y/kg/d | tions | |
| Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrati Normal value in fresh water Normal value in marine water Normal value for fresh water so Normal value for marine water | ediment | | | STEL/15min mg/m3 0,00678 678 0,125 0,0125 | mg ng/ mg | Observa SKIN y/I //L //kg/d | tions | |
| Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrati Normal value in fresh water Normal value in marine water Normal value for fresh water so Normal value for marine water | ediment sediment anisms | | | STEL/15min mg/m3 0,00678 678 0,125 0,0125 1,6 | mg ng, mg mg | Observa SKIN y/I //L y/kg/d y/kg/d | tions | |
| Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrati Normal value in fresh water Normal value in marine water Normal value for fresh water so Normal value for marine water Normal value for marine water Normal value for the terrestrial | ediment sediment anisms compartment | mg/m3 | | STEL/15min mg/m3 0,00678 678 0,125 0,0125 | mg ng, mg mg | Observa SKIN y/I //L //kg/d | tions | |
| Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrati Normal value in fresh water Normal value in marine water Normal value for fresh water so Normal value for marine water Normal value for betterestrial Normal value for the terrestrial Health - Derived no-effect | ediment sediment anisms compartment t level - DNEL / I Effects on consumers | mg/m3 | 5 | STEL/15min mg/m3 0,00678 678 0,125 0,0125 1,6 0,0209 | mg ng, mg mg mg | Observa SKIN //I //L //kg/d //kg/d //kg/d | IFV, Skin | , DSEN, A4 |
| Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrati Normal value in fresh water Normal value in marine water Normal value for fresh water so Normal value for marine water Normal value for the terrestrial Health - Derived no-effect Route of exposure | ediment sediment anisms compartment t level - DNEL / I | mg/m3 | | STEL/15min mg/m3 0,00678 678 0,125 0,0125 1,6 0,0209 Chronic systemic | mg ng/ mg mg mg | Observa SKIN y/I //L y/kg/d y/kg/d | tions | |
| Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrati Normal value in fresh water Normal value in marine water Normal value for fresh water so Normal value for marine water Normal value for marine water Normal value for the terrestrial Health - Derived no-effect | ediment sediment anisms compartment t level - DNEL / I Effects on consumers | mg/m3 | 5 | STEL/15min mg/m3 0,00678 678 0,125 0,0125 1,6 0,0209 Chronic | mg ng, mg mg mg | Observa SKIN y/I //L y/kg/d y/kg/d y/kg/d Acute | IFV, Skin | , DSEN, A4 |
| Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrati Normal value in fresh water Normal value in marine water Normal value for fresh water so Normal value for marine water Normal value for the terrestrial Health - Derived no-effect Route of exposure | ediment sediment anisms compartment t level - DNEL / I Effects on consumers | mg/m3 | 5 | STEL/15min mg/m3 0,00678 678 0,125 0,0125 1,6 0,0209 Chronic systemic 0,600 mg/kg | mg ng, mg mg mg | Observa SKIN y/I //L y/kg/d y/kg/d y/kg/d Acute | IFV, Skin | , DSEN, A4 |

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| Predicted no-effect concentration | n - PNEC | | | | | | | |
|-------------------------------------|---|----------------|---------------|---------------------------------|--------------------|-------------------|---------------|-------------------|
| Normal value in fresh water | | | | 0,2 | mg | ı/l | | |
| Normal value in marine water | | | | 0,02 | mg | j/l | | |
| Normal value for fresh water sec | liment | | | 2,22 | mg | ı/kg/d | | |
| Normal value for marine water s | ediment | | | 0,222 | mg | ı/kg/d | | |
| Normal value of STP microorgar | nisms | | | 10 | mg | ı/l | | |
| Normal value for the terrestrial c | ompartment | | | 0,327 | mg | ı/kg/d | | |
| Health - Derived no-effect | level - DNEL / D Effects on consumers | MEL | | | Effects on workers | | | |
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic | Acute local | Acute | Chronic local | Chronic |
| Oral | | | | systemic 2,49 mg/kg | | systemic | | systemic |
| Inhalation | | | | bw/d 4,33 mg/m3 | | | | 24,58 mg/m |
| | | | 4.5 | | | | | |
| Skin | | | 1,5 mg/cm2 | 1,25 mg/kg bw/d | | | | 3,5 mg/kg bw/d |
| Linalyl acetate | | | | | | | | |
| Predicted no-effect concentration | n - PNEC | | | | | | | |
| Normal value in fresh water | | | | 0,011 | mg | 1/ I | | |
| Normal value in marine water | | | | 0,0011 | mg | ŋ/I | | |
| Normal value for fresh water sec | liment | | | 0,609 | mg | ı/kg/d | | |
| Normal value for marine water s | ediment | | | 0,0609 | mg | J/kg/d | | |
| Normal value of STP microorganisms | | | | 1 | mg | ı/l | | |
| Normal value for the terrestrial c | ompartment | | | 0,115 | mg | J/kg/d | | |
| Health - Derived no-effect | level - DNEL / D Effects on consumers | DMEL | | | Effects on workers | | | |
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic | Acute local | Acute | Chronic local | Chronic |
| Oral | | | | systemic 0,200 mg/kg bw/d | | systemic | | systemic |
| Inhalation | | | | 0,680 mg/m3 | | | | 2,75 mg/m3 |
| Skin | | | | 1,25 mg/kg bw/d | | | | 2,5 mg/kg bw/d |
| Benzene, 1-Methoxy-4- (1- | Propenyl) - (F) | _ | | | | | | |
| Predicted no-effect concentration | n - PNEC | | | | | | | |
| Normal value in fresh water | | | | 0,00682 | mg | 1/I | | |
| Normal value in marine water | | | | 682 | ng | /L | | |
| Normal value for fresh water sec | liment | | | 0,514 | mg | ı/kg/d | | |
| Normal value for marine water s | ediment | | | 0,0514 | mg | ı/kg/d | | |
| Normal value for water, intermitted | ent release | | | 0,00682 | mg | 1/l | | |
| Normal value of STP microorgar | nisms | | | 0,972 | mg | ı/l | | |
| Normal value for the terrestrial c | ompartment | | | 0,0988 | | ı/kg/d | | |
| Health - Derived no-effect | · | DMEL | | | Effects on workers | | | |
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| | | | | | | | | |

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Skin 1,5 mg/kg 3 mg/kg bw/d bw/d

| 2-Propenal, 2-Methyl-3-Phenyl-, (2e) - | | | |
|--|---------|---------|--|
| Predicted no-effect concentration - PNEC | | | |
| Normal value in fresh water | 0,00138 | mg/l | |
| Normal value in marine water | 138 | ng/L | |
| Normal value for fresh water sediment | 0,0209 | mg/kg/d | |
| Normal value for marine water sediment | 0,00209 | mg/kg/d | |
| Normal value for water, intermittent release | 0,0039 | mg/l | |
| Normal value of STP microorganisms | 3,66 | mg/l | |
| Normal value for the terrestrial compartment | 0,058 | mg/kg/d | |

| Health - Derived no-effect level - DNEL / DMEL | | | | | | | | |
|--|-------------|----------------|---------------|----------|-------------|----------|---------------|----------|
| | Effects on | | | | Effects on | | | |
| | consumers | | | | workers | | | |
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic | Acute local | Acute | Chronic local | Chronic |
| | | | | systemic | | systemic | | systemic |
| Skin | | | | | | | 3,5 mg/cm2 | |

Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available; NEA = no exposure expected; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

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ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Properties | Value | Information |
|--|---|--|
| Appearance | clear liquid | Concentration: 100 % Temperature: = 20 °C |
| Colour | straw yellow | Concentration: 100 % Temperature: = 20 °C |
| Odour | characteristic | Concentration: = 100 % Temperature: 20 °C |
| Odour threshold | Not applicable | |
| Melting point / freezing point Initial boiling point Flammability Lower explosive limit Upper explosive limit Flash point Auto-ignition temperature pH | < 0 °C = 80 °C flammable liquid 3,5 % (v/v) 15 % (v/v) < 23 °C = 430 °C | Concentration: = 100 % Concentration: 100 % Concentration: 100 % Concentration: = 100 % Concentration: = 100 % Concentration: 100 % Concentration: = 100 % Concentration: 100 % Temperature: = 20 °C |
| Kinematic viscosity | Not available | |
| Solubility | partially soluble in water | Concentration: = 100 % Temperature: = 20 °C |
| Partition coefficient: n-octanol/water | Not available | |
| Vapour pressure | Not available | |
| Density and/or relative density | 0,82 - 0,84 g/cm ³ | Concentration: 100 % Temperature: = 20 °C |
| Relative vapour density | Not available | |
| Particle characteristics | Not applicable | |

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

87,16 % - 740,86 g/litre 45,46 % - 386,44 g/litre VOC (Directive 2010/75/EU) Concentration: 100 % VOC (volatile carbon) Concentration: 100 % Oxidising properties not oxidizing Concentration: 100 % Temperature: 20 °C

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

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10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

ETHANOL

Risk of explosion on contact with: alkaline metals,alkaline oxides,calcium hypochlorite,sulphur monofluoride,acetic anhydride,acids,concentrated hydrogen peroxide,perchlorates,perchloric acid,perchloronitrile,mercury nitrate,nitric acid,silver,silver nitrate,ammonia,silver oxide,ammonia,strong oxidising agents,nitrogen dioxide.May react dangerously with: bromoacetylene,chlorine acetylene,bromine trifluoride,chromium trioxide,chromyl chloride,fluorine,potassium tert-butoxide,lithium hydride,phosphorus trioxide,black platinum,zirconium (IV) chloride,zirconium (IV) iodide.Forms explosive mixtures with: air.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

FTHANOL

Avoid exposure to: sources of heat,naked flames.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:

ATE (Oral) of the mixture:

Not classified (no significant component)

Not classified (no significant component)

Not classified (no significant component)

ETHANOL

LD50 (Oral): > 5000 mg/kg Rat

LC50 (Inhalation vapours): 120 mg/l/4h Pimephales promelas

Propyl (2s) -2- (1,1-Dimethylpropoxy) -propanoate

LD50 (Oral): > 2000 mg/kg LD50 (Dermal): > 2000 mg/kg

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Eugenol

LD50 (Oral): 2000 mg/kg Rat

Cinnamal

LD50 (Oral): 2220 mg/kg Rat LD50 (Dermal): 1260 mg/kg Rabbit

Coumarin

LD50 (Oral): 293 mg/kg Rat

STA (Oral): 500 mg/kg estimate from table 3.1.2 of Annex I of the CLP

(figure used for calculation of the acute toxicity estimate of the mixture)

Cinnamyl alcohol

LD50 (Oral): 2000 mg/kg Rat LD50 (Dermal): 2000 mg/kg Rat

Citral

LD50 (Oral): 6800 mg/kg Rat LD50 (Dermal): 2000 mg/kg Rat

∟inalool

 LD50 (Oral):
 2790 mg/kg Rat

 LD50 (Dermal):
 5610 mg/kg Rabbit

Linalyl acetate

LD50 (Oral): 9000 mg/kg Rat LD50 (Dermal): 5000 mg/kg Rabbit

Benzene, 1-Methoxy-4- (1-Propenyl) -, (E) -LD50 (Oral):

LD50 (Oral): > 1420 mg/kg Rat LD50 (Dermal): 4900 mg/kg Rabbit

2-Propenal, 2-Methyl-3-Phenyl-, (2e) -

LD50 (Oral): 2050 mg/kg Rat LD50 (Dermal): 5000 mg/kg Rabbit

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

Respiratory sensitization

Information not available

Skin sensitization

Information not available

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

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REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class.

Adverse effects on sexual function and fertility

Information not available.

Adverse effects on development of the offspring Information not available.

Effects on or via lactation

Information not available.

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class.

Target organs

Information not available.

Route of exposure

Information not available.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class.

Target organs

Information not available.

Route of exposure

Information not available.

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class.

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

(R)-P-MENTHA-1,8-DIENE

LC50 - for Fish 35 mg/l/96h Oncorhynchus mykiss 69,6 mg/l/48h Daphnia pulex EC50 - for Crustacea

Linalool

LC50 - for Fish 27,8 mg/l/96h EC50 - for Crustacea 59 mg/l/48h EC10 for Algae / Aquatic Plants 54,3 mg/l/4d

Coumarin

LC50 - for Fish > 1,324 mg/l/96h

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Chronic NOEC for Fish 8,012 mg/l 30 days
Chronic NOEC for Crustacea 0,5 mg/l 21 days
Chronic NOEC for Algae / Aquatic Plants 0,431 mg/l 72h

Linalyl acetate

 LC50 - for Fish
 11 mg/l/96h

 EC50 - for Crustacea
 59 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 68 mg/l/72h

Cinnamal

 LC50 - for Fish
 > 2,35 mg/l/96h

 Chronic NOEC for Fish
 15,159 mg/l 28 days

Chronic NOEC for Algae / Aquatic Plants 37,23 mg/l freshwater algae

Eugenol

 LC50 - for Fish
 13 mg/l/96h

 EC50 - for Crustacea
 > 1,05 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 24 mg/l/72h

Cinnamyl alcohol

 LC50 - for Fish
 9 mg/l/96h

 EC50 - for Crustacea
 7,7 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 19,7 mg/l/72h

Eucalyptol

LC50 - for Fish 57 mg/l/96h EC50 - for Crustacea 100 mg/l/48h

Chronic NOEC for Algae / Aquatic Plants 37 mg/l freshwater algae

Citral

 LC50 - for Fish
 6,78 mg/l/96h

 EC50 - for Crustacea
 6,8 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 103,8 mg/l/72h

Propyl (2s) -2- (1,1-Dimethylpropoxy) -

propanoate

 LC50 - for Fish
 13 mg/l/96h

 EC50 - for Crustacea
 20 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 > 85 mg/l/72h

Benzene, 1-Methoxy-4- (1-Propenyl) -, (E) -

 LC50 - for Fish
 7 mg/l/96h

 EC50 - for Crustacea
 4,25 mg/l/48h

EC50 - for Algae / Aquatic Plants 9,57 mg/l/72h freshwater algae

Chronic NOEC for Fish 4,14 mg/l 7 days

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Chronic NOEC for Crustacea 1,05 mg/l 21 days

2-Propenal, 2-Methyl-3-Phenyl-, (2e) -

LC50 - for Fish > 1,2 mg/l/96h EC50 - for Crustacea 9,9 mg/l/48h

EC10 for Algae / Aquatic Plants 0,12 mg/l/72h freshwater algae

Chronic NOEC for Crustacea 0,063 mg/l 21 days

12.2. Persistence and degradability

(R)-P-MENTHA-1,8-DIENE

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

ETHANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

Linalool

Solubility in water 1,56 g/l

Rapidly degradable

Coumarin

Solubility in water 1,9 g/l

Rapidly degradable

Linalyl acetate

Solubility in water 30 mg/l

Rapidly degradable

Cinnamal

Solubility in water 2,8 g/l

Rapidly degradable

Eugenol

Solubility in water 1,154 g/l

Rapidly degradable

Cinnamyl alcohol

Solubility in water 2,542 g/l

Entirely degradable

Eucalyptol

Solubility in water 2,397 g/l

Rapidly degradable

Citral

Solubility in water 420 mg/l

Rapidly degradable

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Propyl (2s) -2- (1,1-Dimethylpropoxy) -

propanoate

Rapidly degradable

Benzene, 1-Methoxy-4- (1-Propenyl) -, (E) -

Solubility in water 111 mg/l

Rapidly degradable

2-Propenal, 2-Methyl-3-Phenyl-, (2e) -

Solubility in water 490 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

(R)-P-MENTHA-1,8-DIENE

Partition coefficient: n-octanol/water 4,38 BCF 1022

ETHANOL

Partition coefficient: n-octanol/water -0,35

Linalool

Partition coefficient: n-octanol/water 2,9 Log Kow @ 20°C

Coumarin

Partition coefficient: n-octanol/water 1,39 Log Kow @ 25°C

Linalyl acetate

Partition coefficient: n-octanol/water 3,9 Log Kow BCF 174 L/kg ww

Cinnamal

Partition coefficient: n-octanol/water 1,83 Log Kow @ 25°C

Eugenol

Partition coefficient: n-octanol/water 1,83 Log Kow @ 30°C

Cinnamyl alcohol

Partition coefficient: n-octanol/water 1,452 Log Kow @ 25°c

Eucalyptol

Partition coefficient: n-octanol/water 3,4 Log Kow BCF 112 L/kg ww

Citral

Partition coefficient: n-octanol/water 2,76 Log Kow

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Benzene, 1-Methoxy-4- (1-Propenyl) -, (E) -

Partition coefficient: n-octanol/water 3,388 Log Kow BCF 79,92 L/kg ww

2-Propenal, 2-Methyl-3-Phenyl-, (2e) -

Partition coefficient: n-octanol/water 2,471 Log Kow @ 25°C

12.4. Mobility in soil

Information not available.

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1266

14.2. UN proper shipping name

ADR / RID: PERFUMERY PRODUCTS
IMDG: PERFUMERY PRODUCTS
IATA: PERFUMERY PRODUCTS

14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3



14.4. Packing group

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ADR / RID, IMDG, IATA: II

14.5. Environmental hazards

ADR / RID: NO IMDG: NO IATA: NO

14.6. Special precautions for user

ADR / RID: HIN - Kemler: 33 Limited Quantities: 5 L Tunnel restriction code:

(D/E)

Special provision: 163, 640D

IMDG: EMS: F-E, S-D Limited Quantities: 5 L

IATA: Cargo: Maximum quantity: 60 L Packaging instruction

Pass.: Maximum quantity: 5 L

Special provision: A3, A72

Packaging instructions: 364
Packaging instructions: 353

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant.

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

<u>Product</u>

Point 3 - 40

Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

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Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 2 Flammable liquid, category 2
Acute Tox. 4 Acute toxicity, category 4
Asp. Tox. 1 Aspiration hazard, category 1
Eye Irrit. 2 Eye irritation, category 2
Skin Irrit. 2 Skin irritation, category 2
Skin Sens. 1A Skin sensitization, category 1A

Aquatic Acute 1 Hazardous to the aquatic environment, acute toxicity, category 1

Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.H312 Harmful in contact with skin.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- · IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value

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- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- Regulation (EU) 2020/878 (II Annex of REACH Regulation)
- 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EÚ) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2019/521 (XII Atp. CLP)
- 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
- 17. Regulation (EU) 2019/1148
- 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
- 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
- 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

01 / 03 / 08 / 11 / 12.