# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

## AUTO GREASE

| | | | |
|---|---|---|---|
| Creation date | 08th December 2020 | | |
| Revision date | | Version | 3.0 |

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

**1.1. Product identifier** AUTO GREASE

| | |
|---|---|
| Substance / mixture | mixture |
| Number | R 34073; R 34074 |
| UFI | 9AC1-D3JK-C006-Q8NP |

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

| | |
|---|---|
| Mixture's intended use | Lubricating agent. |
| Mixture uses advised against | For professional use only. |

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

**Supplier**

| | |
|---|---|
| Name or trade name | RETECH, s.r.o. |
| Address | Vackova 1541/4, Praha 5 - Stodůlky, 155 00<br>Czech Republic |
| Identification number (CRN) | 25018205 |
| VAT Reg No | CZ25018205 |
| Phone | +420327596428 |
| E-mail | info@retech.cz |
| Web address | www.retech.com |

**Competent person responsible for the safety data sheet**

| | |
|---|---|
| Name | RETECH, s.r.o. |
| E-mail | info@retech.cz |

**1.4. Emergency telephone number**

European emergency number: 112

**SECTION 2: Hazards identification**

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

**Classification of the mixture in accordance with Regulation (EC) No 1272/2008**

The mixture is classified as dangerous.

Aerosol 1, H222, H229
Asp. Tox. 1, H304
Skin Irrit. 2, H315
Eye Irrit. 2, H319
STOT SE 3, H336
Aquatic Chronic 3, H412

Full text of all classifications and hazard statements is given in the section 16.

**Most serious adverse physico-chemical effects**

Extremely flammable aerosol. Pressurised container: May burst if heated.

**Most serious adverse effects on human health and the environment**

May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

**2.2. Label elements**

**Hazard pictogram**

**Signal word**

Danger

**Hazardous substances**

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics
hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
propan-2-ol

**Hazard statements**

| | |
|---|---|
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: May burst if heated. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H412 | Harmful to aquatic life with long lasting effects. |

**Precautionary statements**

| | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P211 | Do not spray on an open flame or other ignition source. |
| P251 | Do not pierce or burn, even after use. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/eye protection/face protection. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P312 | Call a POISON CENTER/doctor if you feel unwell. |
| P321 | Specific treatment (see  on this label). |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P410+P412 | Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F. |

**Supplemental information**

**2.3. Other hazards**

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

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

**3.2. Mixtures**

**Chemical characterization**

Mixture of substances and additives specified below.

**Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment**

| Identification numbers | Substance name | Content in % weight | Classification according to Regulation (EC) No 1272/2008 | Note |
|---|---|---|---|---|
| CAS: 106-97-8<br>EC: 203-448-7<br>Registration number: 01-2119474691-32 | butane (containing < 0,1 % butadiene (203-450-8)) | 25-<50 | Flam. Gas 1A, H220<br>Press. Gas (compressed gas), H280 | 4 |
| EC: 927-510-4<br>Registration number: 01-2119475515-33 | hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics | 10-<25 | Flam. Liq. 2, H225<br>Asp. Tox. 1, H304<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Aquatic Chronic 2, H411 | |
| CAS: 74-98-6<br>EC: 200-827-9<br>Registration number: 01-2119486944-21 | propane | 10-<25 | Flam. Gas 1A, H220<br>Press. Gas (compressed gas), H280 | |
| EC: 921-024-6<br>Registration number: 01-2119475514-35 | hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | 2,5-<10,0 | Flam. Liq. 2, H225<br>Asp. Tox. 1, H304<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Aquatic Chronic 2, H411 | |
| CAS: 75-28-5<br>EC: 200-857-2<br>Registration number: 01-2119485395-27 | isobutane (containing < 0,1 % butadiene (203-450-8)) | 2,5-<10,0 | Flam. Gas 1A, H220<br>Press. Gas (compressed gas), H280 | |
| CAS: 67-63-0<br>EC: 200-661-7<br>Registration number: 01-2119457558-25 | propan-2-ol | 1,0-<2,5 | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336 | 4 |
| CAS: 1305-62-0<br>Registration number: 01-2119475151-45 | calcium-dihydroxide | 1,0-<2,5 | Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>STOT SE 3, H335 | 4 |
| CAS: 13463-67-7<br>EC: 236-675-5 | titanium dioxide | 0,1-<1,0 | Carc. 2, H351 (inhalation) | 1, 2, 3, 4 |
| CAS: 95-38-5<br>Registration number: 01-2119777867-13 | 2-(2-heptadec-8-enyl-2-imidazolin-1-yl) ethanol | 0,025-<0,1 | Acute Tox. 4, H302<br>Skin Corr. 1C, H314<br>STOT RE 2, H373<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 (M=10) | |

**Notes**

1 Note V: If the substance is to be placed on the market as fibres (with diameter < 3 µm, length > 5 µm and aspect ratio ≥ 3:1) or particles of the substance fulfilling the WHO fibre criteria or as particles with modified surface chemistry, their hazardous properties must be evaluated in accordance with Title II of this Regulation, to assess whether a higher category (Carc. 1B or 1A) and/or additional routes of exposure (oral or dermal) should be applied.

2 Note W: It has been observed that the carcinogenic hazard of this substance arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

This note aims to describe the particular toxicity of the substance; it does not constitute a criterion for classification according to this Regulation.

3 Note 10: The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 μm.

4 Substance for which exposure limits of Community for working environment exist.

Full text of all classifications and hazard statements is given in the section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

**If inhaled**

Terminate the exposure immediately; move the affected person to fresh air. In case of unconsciousness place patient stably in side position for transportation.

**If on skin**

Immediately wash with water and soap and rinse thoroughly.

**If in eyes**

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. In the event of issues, find medical advice.

**If swallowed**

DO NOT INDUCE VOMITING! Provide medical treatment.

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

**If inhaled**

May cause drowsiness or dizziness.

**If on skin**

Causes skin irritation.

**If in eyes**

Causes serious eye irritation.

**If swallowed**

not available

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

not available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media**

Alcohol-resistant foam, carbon dioxide, powder, water mist.

**Unsuitable extinguishing media**

Water - full jet.

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

not available

### 5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing.

## SECTION 6: Accidental release measures

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

Provide sufficient ventilation. Use personal protective equipment for work. Keep unprotected persons away.

**6.2. Environmental precautions**

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system.

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

Provide sufficient ventilation. Dispose of the collected material according to the instructions in the section 13. Do not flush with water or aqueous cleansing agents.

**6.4. Reference to other sections**

See the Section 7, 8 and 13.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Do not spray on an open flame or other ignition source. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. No smoking. Take action to prevent static discharges. Pressurised container: May burst if heated. Keep away from sources of heating, ignition and direct sunlight. Do not pierce or burn, even after use.

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

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Protect from sunlight. Keep container tightly closed. Do not expose to temperatures exceeding 50 °C.

Storage class 2B - Aerosols

**7.3. Specific end use(s)**

not available

## SECTION 8: Exposure controls/personal protection

**8.1. Control parameters**

The mixture contains substances for which occupational exposure limits are set.

**DNEL**

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

| Workers / consumers | Route of exposure | Value | Effect | Determining method |
|---|---|---|---|---|
| Consumers | Oral | 699 mg/kg bw/day | Systemic chronic effects | |
| Consumers | Dermal | 699 mg/kg bw/day | Systemic chronic effects | |
| Workers | Dermal | 773 mg/kg bw/day | Systemic chronic effects | |
| Consumers | Inhalation | 608 mg/m³ | Systemic chronic effects | |
| Workers | Inhalation | 2035 mg/m³ | Systemic chronic effects | |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

| Workers / consumers | Route of exposure | Value | Effect | Determining method |
|---|---|---|---|---|
| Consumers | Oral | 149 mg/kg bw/day | Systemic chronic effects | |
| Consumers | Dermal | 149 mg/kg bw/day | Systemic chronic effects | |
| Workers | Dermal | 300 mg/kg bw/day | Systemic chronic effects | |
| Consumers | Inhalation | 477 mg/m³ | Systemic chronic effects | |
| Workers | Inhalation | 2085 mg/m³ | Systemic chronic effects | |

propan-2-ol

| Workers / consumers | Route of exposure | Value | Effect | Determining method |
|---|---|---|---|---|
| Consumers | Oral | 26 mg/kg bw/day | Systemic chronic effects | |
| Consumers | Dermal | 319 mg/kg bw/day | Systemic chronic effects | |
| Workers | Dermal | 888 mg/kg bw/day | Systemic chronic effects | |
| Consumers | Inhalation | 89 mg/m³ | Systemic chronic effects | |
| Workers | Inhalation | 500 mg/m³ | Systemic chronic effects | |

**8.2. Exposure controls**

Do not store together with food, drink and animal feed. Remove contaminated clothes immediately. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Do not inhale vapours. Do not inhale aerosols. Prevent contact with skin and eyes.

**Eye/face protection**

Tightly sealed goggles.

**Skin protection**

Hand protection: Protective gloves resistant to the product. Material of gloves: Nitrile rubber, NBR. Recommended thickness of the material: ≥ 0.5 mm. Penetration time of glove material: > 480 min. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. Filter A2/P2.

**Thermal hazard**

Not available.

**Environmental exposure controls**

Observe usual measures for protection of the environment, see Section 6.2.

**SECTION 9: Physical and chemical properties**

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

| | |
|---|---|
| Appearance | spray |
| physical state | liquid at 20 °C |
| color | light beige |
| Odour | characteristic |
| Odour threshold | data not available |
| pH | data not available |
| Melting point/freezing point | data not available |
| Initial boiling point and boiling range | -44.5 °C |
| Flash point | -97 °C |
| Evaporation rate | data not available |
| Flammability (solid, gas) | Extremely flammable aerosol. |
| Upper/lower flammability or explosive limits | |
| flammability limits | data not available |
| explosive limits | |
| bottom | 0.6 % |
| upper | 12.0 % |
| Vapour pressure | 4500 hPa at 20 °C |
| Vapour density | data not available |
| Relative density | data not available |
| Solubility(ies) | |
| solubility in water | almost insoluble |
| solubility in fats | data not available |
| Partition coefficient: n-octanol/water | data not available |
| Auto-ignition temperature | data not available |
| Decomposition temperature | data not available |
| Viscosity | data not available |
| Explosive properties | The product does not have explosive properties but can be explosive when blended with air. |
| Oxidising properties | data not available |

data not available

**9.2. Other information**

| | |
|---|---|
| Density | 0.645 g/cm³ at 20 °C |
| ignition temperature | 365 °C |
| content of organic solvents (VOC) | 82.1 % |
| solid content (dry matter) | 15.2 % volume |
| Max. VOC content in the product in its ready to use condition | 529.5 g/l |

Product is not selfigniting.

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

not available

**10.2. Chemical stability**

The product is stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Unknown.

**10.4. Conditions to avoid**
not available

**10.5. Incompatible materials**
not available

**10.6. Hazardous decomposition products**
Unknown.

## SECTION 11: Toxicological information

**11.1. Information on toxicological effects**
No toxicological data is available for the mixture.

**Acute toxicity**
Based on available data the classification criteria are not met.

calcium-dihydroxide

| Route of exposure | Parameter | Value | Time of exposure | Species | Sex |
|---|---|---|---|---|---|
| Oral | $LD_{50}$ | >2001 mg/kg | | Rat | |
| Dermal | $LD_{50}$ | >2500 mg/kg | | Rabbit | |

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

| Route of exposure | Parameter | Value | Time of exposure | Species | Sex |
|---|---|---|---|---|---|
| Oral | $LD_{50}$ | >5840 mg/kg | | Rat | |
| Dermal | $LD_{50}$ | >2920 mg/kg | | Rabbit | |
| Inhalation | $LC_{50}$ | >25 mg/l | 4 hour | Rat | |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

| Route of exposure | Parameter | Value | Time of exposure | Species | Sex |
|---|---|---|---|---|---|
| Oral | $LD_{50}$ | >5840 mg/kg | | Rat | |
| Dermal | $LD_{50}$ | >2920 mg/kg | | Rat | |
| Inhalation | $LC_{50}$ | 23.3 mg/l | 4 hour | Rat | |

propan-2-ol

| Route of exposure | Parameter | Value | Time of exposure | Species | Sex |
|---|---|---|---|---|---|
| Oral | $LD_{50}$ | 5840 mg/kg | | Rat | |
| Dermal | $LD_{50}$ | 13900 mg/kg | | Rabbit | |
| Inhalation | $LC_{50}$ | 25000 mg/m³ | 6 hour | Rat | |

**Skin corrosion/irritation**
Causes skin irritation.

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

**Respiratory or skin sensitisation**
Based on available data the classification criteria are not met.

**Germ cell mutagenicity**
Based on available data the classification criteria are not met.

**Carcinogenicity**
Based on available data the classification criteria are not met.

**Reproductive toxicity**
Based on available data the classification criteria are not met.

**Toxicity for specific target organ - single exposure**
May cause drowsiness or dizziness.

**Toxicity for specific target organ - repeated exposure**
Based on available data the classification criteria are not met.

**Aspiration hazard**
May be fatal if swallowed and enters airways.

## SECTION 12: Ecological information

### 12.1. Toxicity

**Acute toxicity**
Harmful to aquatic life with long lasting effects.

calcium-dihydroxide

| Parameter | Value | Time of exposure | Species | Environment |
|---|---|---|---|---|
| $EC_{50}$ | 184.57 mg/l | 72 hour | Algae | |
| $LC_{50}$ | 50.6 mg/l | 96 hour | Fishes | |
| $EC_{50}$ | 59.1 mg/l | | Daphnia | |

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

| Parameter | Value | Time of exposure | Species | Environment |
|---|---|---|---|---|
| LL 50 | 11.4 mg/l | 96 hour | Fishes (Oncorhynchus mykiss) | |
| EL 50 | 3 mg/l | 48 hour | Invertebrates (Daphnia magna) | |
| EL 50 | 30-100 mg/l | 72 hour | Algae (Pseudokirchneriella subcapitata) | |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

| Parameter | Value | Time of exposure | Species | Environment |
|---|---|---|---|---|
| $LC_{50}$ | >13.4 mg/l | 96 hour | Fishes | |
| $EC_{50}$ | 3 mg/l | 48 hour | Invertebrates (Daphnia magna) | |
| EL 50 | 10-30 mg/l | 72 hour | Algae | |

propan-2-ol

| Parameter | Value | Time of exposure | Species | Environment |
|---|---|---|---|---|
| $LC_{50}$ | 9714 mg/l | 24 hour | Invertebrates (Daphnia magna) | |
| $LC_{50}$ | 9640 mg/l | 96 hour | Fishes (Pimephales promelas) | |

**Chronic toxicity**

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

| Parameter | Value | Time of exposure | Species | Environment |
|---|---|---|---|---|
| LOEC | 0.32 mg/l | 21 day | Invertebrates (Daphnia magna) | |
| NOEC | 0.17 mg/l | 21 day | Invertebrates (Daphnia magna) | |
| NOELR | 3 mg/l | 72 hour | Algae (Pseudokirchneriella subcapitata) | |

propan-2-ol

| Parameter | Value | Time of exposure | Species | Environment |
|---|---|---|---|---|
| LOEC | 1000 mg/l | 8 day | Algae | |

**12.2. Persistence and degradability**

Limited biodegradability.

**12.3. Bioaccumulative potential**

Not available.

**12.4. Mobility in soil**

Not available.

**12.5. Results of PBT and vPvB assessment**

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

**12.6. Other adverse effects**

Water hazard class 2 (German Regulation; Self-assessment): hazardous for water. Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification.

**Waste management legislation**

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

**Waste type code**

16 03 05 organic wastes containing hazardous substances *

**Packaging waste type code**

15 01 11 metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers *

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

## SECTION 14: Transport information

**14.1. UN number**

UN 1950

**14.2. UN proper shipping name**

AEROSOLS

**14.3. Transport hazard class(es)**

2 Gases

**14.4. Packing group**

not available

**14.5. Environmental hazards**

not available

**14.6. Special precautions for user**

Reference in the Sections 4 to 8.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

not available

**Additional information**

Segregation groups: Alkalis. Stowage Code: SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. Segregation Code: SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

| | |
|---|---|
| Hazard identification No. | |
| UN number | 1950 |
| Classification code | 5F |
| Safety signs | 2.1+hazardous for the environment |


**Road transport - ADR**

| | |
|---|---|
| Limited quantities | 1L |
| Excepted quantities | E0 |
| Transport category | 2 |
| Tunnel restriction code | (D) |

**Marine transport - IMDG**

| | |
|---|---|
| EmS (emergency plan) | F-D, S-U |
| Marine Pollutant | No |

## SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

**15.2. Chemical safety assessment**

not available

## SECTION 16: Other information

**A list of standard risk phrases used in the safety data sheet**

| | |
|---|---|
| H220 | Extremely flammable gas. |
| H222 | Extremely flammable aerosol. |
| H225 | Highly flammable liquid and vapour. |

| | |
|---|---|
| H229 | Pressurised container: May burst if heated. |
| H280 | Contains gas under pressure; may explode if heated. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer if inhaled. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| 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. |

**Guidelines for safe handling used in the safety data sheet**

| | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P211 | Do not spray on an open flame or other ignition source. |
| P251 | Do not pierce or burn, even after use. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/eye protection/face protection. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P312 | Call a POISON CENTER/doctor if you feel unwell. |
| P321 | Specific treatment (see on this label). |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P410+P412 | Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F. |

**Other important information about human health protection**

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

**Key to abbreviations and acronyms used in the safety data sheet**

| | |
|---|---|
| ADR | European agreement concerning the international carriage of dangerous goods by road |
| BCF | Bioconcentration Factor |
| CAS | Chemical Abstracts Service |
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures |
| DNEL | Derived no-effect level |
| EC | Identification code for each substance listed in EINECS |
| $EC_{50}$ | Concentration of a substance when it is affected 50% of the population |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| EmS | Emergency plan |
| EU | European Union |
| IATA | International Air Transport Association |
| IBC | International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals |
| $IC_{50}$ | Concentration causing 50% blockade |

| | |
|---|---|
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods |
| INCI | International Nomenclature of Cosmetic Ingredients |
| ISO | International Organization for Standardization |
| IUPAC | International Union of Pure and Applied Chemistry |
| $LC_{50}$ | Lethal concentration of a substance in which it can be expected death of 50% of the population |
| $LD_{50}$ | Lethal dose of a substance in which it can be expected death of 50% of the population |
| LOAEC | Lowest observed adverse effect concentration |
| LOAEL | Lowest observed adverse effect level |
| log Kow | Octanol-water partition coefficient |
| MARPOL | International Convention for the Prevention of Pollution From Ships |
| NOAEC | No observed adverse effect concentration |
| NOAEL | No observed adverse effect level |
| NOEC | No observed effect concentration |
| NOEL | No observed effect level |
| OEL | Occupational Exposure Limits |
| PBT | Persistent, Bioaccumulative and Toxic |
| PNEC | Predicted no-effect concentration |
| ppm | Parts per million |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Agreement on the transport of dangerous goods by rail |
| UN | Four-figure identification number of the substance or article taken from the UN Model Regulations |
| UVCB | Substances of unknown or variable composition, complex reaction products or biological materials |
| VOC | Volatile organic compounds |
| vPvB | Very Persistent and very Bioaccumulative |

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aerosol | Aerosol |
| Aquatic Acute | Hazardous to the aquatic environment |
| Aquatic Chronic | Hazardous to the aquatic environment (chronic) |
| Asp. Tox. | Aspiration hazard |
| Carc. | Carcinogenicity |
| Eye Dam. | Serious eye damage |
| Eye Irrit. | Eye irritation |
| Flam. Gas | Flammable gas |
| Flam. Liq. | Flammable liquid |
| Press. Gas | Gases under pressure |
| Skin Corr. | Skin corrosion |
| Skin Irrit. | Skin irritation |
| STOT RE | Specific target organ toxicity - repeated exposure |
| STOT SE | Specific target organ toxicity - single exposure |

**Training guidelines**

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

**Recommended restrictions of use**

not available

**Information about data sources used to compile the Safety Data Sheet**

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

**The changes (which information has been added, deleted or modified)**

The version 3.0 replaces the SDS version from 21 January 2019. Changes were made in sections 1, 2, 3, 9, 11, 12, 13 and 16.

**Statement**

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.