# PU S 300 B3

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 2/08/2022 Revision date: 15/10/2025 Supersedes version of: 15/11/2024 Version: 3.1

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

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Mixture |
| Trade name | : | PU S 300 B3 |
| UFI | : | SHT0-G0S0-100K-9RGH |
| Article number | : | 00520806 |
| Vaporizer | : | Aerosol |

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

**Relevant identified uses**

Intended for general public

| | | |
|---|---|---|
| Main use category | : | Building and construction work |
| Industrial/Professional use spec | : | As from 24 August 2023 adequate training is required before industrial or professional use |
| Use of the substance/mixture | : | Polyurethane, polyurethane foam |

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

**Manufacturer**
fischerwerke GmbH & Co. KG
Klaus-Fischer-Straße 1
72178 Waldachtal
Germany
T +49(0)7443 12-0, F +49(0)7443 12-4222
info-sdb@fischer.de, www.fischer.de

### 1.4. Emergency telephone number

| | | |
|---|---|---|
| Emergency number | : | +49(0)6132-84463 (24h) |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

| | |
|---|---|
| Aerosol 1 | H222;H229 |
| Acute Tox. 4 (Inhalation:dust,mist) | H332 |
| Skin Irrit. 2 | H315 |
| Eye Irrit. 2 | H319 |
| Resp. Sens. 1 | H334 |
| Skin Sens. 1 | H317 |
| Carc. 2 | H351 |
| Lact. | H362 |
| STOT SE 3 | H335 |
| STOT RE 2 | H373 |
| Aquatic Chronic 4 | H413 |

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

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

Pressurised container: May burst if heated. Extremely flammable aerosol. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Harmful if inhaled. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02 GHS07 GHS08

| | | |
|---|---|---|
| Signal word (CLP) | : | Danger |
| Contains | : | Isocyanic acid, polymethylenepolyphenylene ester; alkanes, C14-17, chloro |

| | | |
|---|---|---|
| Hazard statements (CLP) | : | H222 - Extremely flammable aerosol.<br>H229 - Pressurised container: May burst if heated.<br>H315 - Causes skin irritation.<br>H317 - May cause an allergic skin reaction.<br>H319 - Causes serious eye irritation.<br>H332 - Harmful if inhaled.<br>H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.<br>H335 - May cause respiratory irritation.<br>H351 - Suspected of causing cancer.<br>H362 - May cause harm to breast-fed children.<br>H373 - May cause damage to organs through prolonged or repeated exposure.<br>H413 - May cause long lasting harmful effects to aquatic life. |
| Precautionary statements (CLP) | : | P101 - If medical advice is needed, have product container or label at hand.<br>P102 - Keep out of reach of children.<br>P210 - Keep away from heat, hot surfaces, sparks, open flames. No smoking.<br>P211 - Do not spray on an open flame or other ignition source.<br>P251 - Do not pierce or burn, even after use.<br>P271 - Use only outdoors or in a well-ventilated area.<br>P280 - Wear protective gloves, protective clothing/eye protection/face protection.<br>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P405 - Store locked up.<br>P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.<br>P501 - Dispose of contents/container to Collection point.<br>P260 - Do not breathe dust, fume, gas, mist, vapours, spray. |
| EUH-statements | : | EUH204 - Contains isocyanates. May produce an allergic reaction.<br>EUH066 - Repeated exposure may cause skin dryness or cracking. |
| Extra phrases | : | Without adequate ventilation formation of explosive mixtures may be possible.<br>Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C.<br>Do not pierce or burn, even after use.<br>Do not spray on a naked flame or any incandescent material.<br>Persons already sensitised to diisocyanates may develop allergic reactions when using this product.<br>Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.<br>This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.<br>As from 24 August 2023 adequate training is required before industrial or professional use. |

### 2.3. Other hazards

Contains PBTvPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

| Component | |
|---|---|
| Substance(s) meeting the PBT criteria of REACH regulation, in accordance with Annex XIII | alkanes, C14-17, chloro (85535-85-9) |
| Substance(s) meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | alkanes, C14-17, chloro (85535-85-9) |

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| Isocyanic acid, polymethylenepolyphenylene ester<br>substance with a Community workplace exposure limit | CAS-No.: 9016-87-9<br>EC-No.: 618-498-9 | ≥ 25 – < 40 | Acute Tox. 4 (Inhalation:vapour), H332<br>(ATE=1.5 mg/l/4h)<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Resp. Sens. 1, H334<br>Skin Sens. 1, H317<br>Carc. 2, H351<br>STOT SE 3, H335<br>STOT RE 2, H373<br>EUH204 |
| alkanes, C14-17, chloro<br>substance listed on REACH Candidate List (Medium-chain chlorinated paraffins (MCCP))<br>PBT substance; vPvB substance | CAS-No.: 85535-85-9<br>EC-No.: 287-477-0<br>EC Index-No.: 602-095-00-X<br>REACH-no: 01-2119519269-33 | ≥ 20 – < 25 | Lact., H362<br>Aquatic Acute 1, H400 (M=100)<br>Aquatic Chronic 1, H410 (M=10)<br>EUH066 |
| dimethyl ether<br>substance with a Community workplace exposure limit<br>(Note U) | CAS-No.: 115-10-6<br>EC-No.: 204-065-8<br>EC Index-No.: 603-019-00-8<br>REACH-no: 01-2119472128-37 | ≥ 5 – < 10 | Flam. Gas 1, H220<br>Press. Gas (Liq.), H280 |
| isobutane<br>(Note C)(Note U) | CAS-No.: 75-28-5<br>EC-No.: 200-857-2<br>EC Index-No.: 601-004-00-0<br>REACH-no: 01-2119485395-27 | ≥ 5 – < 10 | Flam. Gas 1, H220<br>Press. Gas (Comp.), H280 |
| butane<br>(Note C)(Note U) | CAS-No.: 106-97-8<br>EC-No.: 203-448-7<br>EC Index-No.: 601-004-00-0<br>REACH-no: 01-2119752523-40 | ≥ 0.1 – < 0.5 | Flam. Gas 1, H220<br>Press. Gas (Comp.), H280 |

**Specific concentration limits:**

| Name | Product identifier | Specific concentration limits (%) |
|---|---|---|
| Isocyanic acid, polymethylenepolyphenylene ester | CAS-No.: 9016-87-9<br>EC-No.: 618-498-9 | (0.1 ≤ C ≤ 100) Resp. Sens. 1; H334<br>(5 ≤ C ≤ 100) STOT SE 3; H335<br>(5 ≤ C ≤ 100) Skin Irrit. 2; H315<br>(5 ≤ C ≤ 100) Eye Irrit. 2; H319 |

Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note U: When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. The following codes are assigned:. Press. Gas (Comp.), Press. Gas (Liq.), Press. Gas (Ref. Liq.), Press. Gas (Diss.). Aerosols shall not be classified as gases under pressure (See Annex I, Part 2, Section 2.3.2.1, Note 2).

Product subject to CLP Annex I, item 1.1.3.7. The disclosure rules of the components is modified in this case.
Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water and soap. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Wash out mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Carbon dioxide. Alcohol-resistant foam.
Unsuitable extinguishing media : Strong water jet.

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

Fire hazard : Extremely flammable aerosol. Keep away from sources of ignition.
Explosion hazard : Pressurised container: May burst if heated.
Reactivity in case of fire : May cause sensitization by inhalation and skin contact.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Combustion products may include the following: carbon oxides (CO, CO2) (carbon monoxide, carbon dioxide) nitrogen oxides (NO, $NO_2$ etc.).

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information : Do not allow water used to extinguish fire to enter drains, ground or waterways.

## SECTION 6: Accidental release measures

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

**For non-emergency personnel**

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Evacuate unnecessary personnel. Shelter from vapours by keeping upwind. Take precautionary measures against static discharge.

**For emergency responders**

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

### 6.2. Environmental precautions

Avoid release to the environment. Do not allow product to reach the sewage system.

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

For containment : Stop leak without risks if possible. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Reduce vapour with vapour-suppression foam.
Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public waters. Take precautionary measures against static discharge. Take up liquid spill into inert absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13. See Section 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wear suitable protective clothing and eye/face protection.

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

Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Keep away from combustible materials. Observe local regulations. Keep out of reach of children. Product must only be kept in the original packaging. Protect from moisture.

Storage temperature : > 5 – ≤ 25 °C

### 7.3. Specific end use(s)

PU installation foams. Building and construction work.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**DNEL and PNEC**

| **Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)** | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Acute - systemic effects, inhalation | 0.1 mg/m³ |
| Long-term - systemic effects, inhalation | 0.05 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Acute - systemic effects, inhalation | 0.05 mg/m³ |
| Long-term - systemic effects, inhalation | 0.025 mg/m³ |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 1 mg/l |
| PNEC aqua (marine water) | 0.1 mg/l |
| PNEC aqua (intermittent, freshwater) | 10 mg/l |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 1 mg/l |

| **dimethyl ether (115-10-6)** | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, inhalation | 1894 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects, inhalation | 471 mg/m³ |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 0.155 mg/l |
| PNEC aqua (marine water) | 0.016 mg/l |
| PNEC aqua (intermittent, freshwater) | 1549 mg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 0.681 mg/kg dwt |
| PNEC sediment (marine water) | 0.069 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 0.045 mg/kg dwt |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 160 mg/l |

| alkanes, C14-17, chloro (85535-85-9) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 47.9 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 6.7 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 0.58 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 2 mg/m³ |
| Long-term - systemic effects, dermal | 28.75 mg/kg bodyweight/day |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 1 µg/l |
| PNEC aqua (marine water) | 0.2 µg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 13 mg/kg dwt |
| PNEC sediment (marine water) | 2.6 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 11.9 mg/kg dwt |
| **PNEC (Oral)** | |
| PNEC oral (secondary poisoning) | 10 mg/kg food |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 80 mg/l |

## 8.2. Exposure controls

### Appropriate engineering controls

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

### Personal protection equipment

**Personal protective equipment symbol(s):**



### Eye and face protection

**Eye protection:**
Safety glasses

| Eye protection | | | |
|---|---|---|---|
| **Type** | **Field of application** | **Characteristics** | **Standard** |
| Safety glasses, Protective goggles | | | EN 166 |

### Skin protection

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

**Hand protection:**
Protective gloves

| Hand protection | | | | | |
|---|---|---|---|---|---|
| **Type** | **Material** | **Permeation** | **Thickness (mm)** | **Penetration** | **Standard** |
| Disposable gloves | Butyl rubber | 3 (> 60 minutes) | > 0,4 | | EN 374-2, EN 374-3 |

| Hand protection | | | | | |
|---|---|---|---|---|---|
| **Type** | **Material** | **Permeation** | **Thickness (mm)** | **Penetration** | **Standard** |
| Disposable gloves | Nitrile rubber (NBR) | 3 (> 60 minutes) | > 0,4 | | EN 374-2, EN 374-3 |

### Respiratory protection

**Respiratory protection:**
In the event of insufficient ventilation: Use self-contained breathing apparatus

| Respiratory protection | | | |
|---|---|---|---|
| **Device** | **Filter type** | **Condition** | **Standard** |
| | Type A - High-boiling (>65 °C) organic compounds | | EN 140 |
| | Filter AX (brown) | | EN 14387 |

### Environmental exposure controls

**Environmental exposure controls:**
Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

| | | |
|---|---|---|
| Physical state | : | Solid |
| Colour | : | Various colours. |
| Appearance | : | Aerosol. |
| Odour | : | Not available |
| Odour threshold | : | Not available |
| Melting point | : | Not available |
| Freezing point | : | Not available |
| Boiling point | : | Aerosol Not applicable |
| Flammability | : | Aerosol Not applicable |
| Explosive properties | : | Pressurised container: May burst if heated. |
| Lower explosion limit | : | 1.7 Vol-% |
| Upper explosion limit | : | 18.6 Vol-% |
| Flash point | : | Aerosol Not applicable |
| Auto-ignition temperature | : | > 200 °C |
| Decomposition temperature | : | Not available |
| pH | : | Not available |
| pH solution | : | Not available |
| Viscosity, kinematic | : | Not applicable |
| Solubility | : | Not miscible. Reacts with water. |
| Partition coefficient n-octanol/water (Log Kow) | : | Not available |
| Vapour pressure | : | 6 bar (23 °C) |
| Vapour pressure at 50°C | : | Not available |
| Density | : | 0.95 g/cm³ |
| Relative density | : | Not available |
| Relative vapour density at 20°C | : | Not applicable |
| Particle size | : | Not available |

### 9.2. Other information

#### Information with regard to physical hazard classes

| | | |
|---|---|---|
| % of flammable ingredients | : | 30 % |

#### Other safety characteristics

| | | |
|---|---|---|
| VOC content | : | 202.7 g/l (21,3 %) |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

Strong acids. Oxidizing agent. Strong bases. Water. alcohols. Amines.

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

| **PU S 300 B3** | |
|---|---|
| ATE CLP (dust,mist) | 3.75 mg/l/4h |

| **Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)** | |
|---|---|
| LD50 oral rat | > 10000 mg/kg (OECD 401 method) |
| LD50 dermal rabbit | > 9400 mg/kg (OECD 402 method) |
| LC50 Inhalation - Rat | 1.5 mg/l |
| LC50 Inhalation - Rat (Vapours) | (OECD 403 method) |

| **dimethyl ether (115-10-6)** | |
|---|---|
| LC50 Inhalation - Rat [ppm] | 164000 ppm |

| **alkanes, C14-17, chloro (85535-85-9)** | |
|---|---|
| LD50 oral rat | > 4000 mg/kg bodyweight |

| **isobutane (75-28-5)** | |
|---|---|
| LC50 Inhalation - Rat | 1443 mg/l |

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.

| **Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)** | |
|---|---|
| IARC group | 3 - Not classifiable |

Reproductive toxicity : May cause harm to breast-fed children.
STOT-single exposure : May cause respiratory irritation.

| **Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)** | |
|---|---|
| STOT-single exposure | May cause respiratory irritation. |

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

| **Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)** | |
|---|---|
| STOT-repeated exposure | May cause damage to organs through prolonged or repeated exposure. |

| **isobutane (75-28-5)** | |
|---|---|
| NOAEL (oral, rat, 90 days) | 250 mg/kg bodyweight |

| | | |
|---|---|---|
| Aspiration hazard | : | Not classified |

| PU S 300 B3 | |
|---|---|
| Vaporizer | Aerosol |

| Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9) | |
|---|---|
| Viscosity, kinematic | > 161.551 mm²/s |

| isobutane (75-28-5) | |
|---|---|
| Viscosity, kinematic | 0 mm²/s |

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

| | | |
|---|---|---|
| Ecology - general | : | (OECD 202 method). Daphnia magna (Water flea). Harmless to daphnia up to the tested concentration. |
| Hazardous to the aquatic environment, short–term (acute) | : | Not classified. |
| Hazardous to the aquatic environment, long–term (chronic) | : | May cause long lasting harmful effects to aquatic life. |
| Additional information | : | No C14-C17 chloroalkanes are washed out of the cured foam if the concentration of C14-C17 chloroalkanes in the mixture does not exceed 20%. See study: Pulverized PU Foam HM23. Leaching study, Limit test" by Dr. Christane Jahns, sponsored by FEICA AISBL, December 9, 2014. |

| PU S 300 B3 | |
|---|---|
| EC50 - Crustacea [1] | 1000 mg/l Daphnia magna (Water flea) |

| Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9) | |
|---|---|
| LC50 - Fish [1] | > 1000 mg/l Brachydanio rerio (zebra-fish) |
| EC50 - Crustacea [1] | > 1000 mg/l Daphnia magna (Water flea) |
| ErC50 algae | > 1640 mg/l Scenedesmus subspicatus |
| NOEC chronic crustacea | > 10 mg/l Daphnia magna (Water flea) |

| dimethyl ether (115-10-6) | |
|---|---|
| LC50 - Fish [1] | > 4.1 g/l Poecilia reticulata (Guppy) |
| EC50 - Crustacea [1] | > 4.4 g/l Daphnia magna (Water flea) |
| EC50 72h - Algae [1] | 154.9 mg/l |

| alkanes, C14-17, chloro (85535-85-9) | |
|---|---|
| LC50 - Fish [1] | 10000 mg/l Common carp |
| EC50 - Crustacea [1] | 0.0059 mg/l Daphnia magna (Water flea) |
| EC50 72h - Algae [1] | 3.2 mg/l Pseudokirchneriella subcapitata |
| LOEC (chronic) | 0.018 mg/l Daphnia magna (Water flea) |
| NOEC (chronic) | 0.01 mg/l Daphnia magna (Water flea) |
| NOEC chronic fish | 4.5 mg/l Oncorhynchus mykiss (Rainbow trout) |

| isobutane (75-28-5) | |
|---|---|
| LC50 - Fish [1] | 312.69 mg/l Brachydanio rerio (zebra-fish) |
| LC50 - Fish [2] | 447000 mg/l |
| EC50 - Crustacea [1] | 7417 mg/l Daphnia magna (Water flea) |
| EC50 72h - Algae [1] | 3855891 mg/l Desmodesmus subspicatus |
| EC50 96h - Algae [1] | 25761.03 mg/l |

### 12.2. Persistence and degradability

| PU S 300 B3 | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| dimethyl ether (115-10-6) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| alkanes, C14-17, chloro (85535-85-9) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| isobutane (75-28-5) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| butane (106-97-8) | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

### 12.3. Bioaccumulative potential

| Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9) | |
|---|---|
| Bioconcentration factor (BCF REACH) | 200 Cyprinus carpio (Common carp) |
| Partition coefficient n-octanol/water (Log Pow) | 10.46 |

| dimethyl ether (115-10-6) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 0.1 (25 °C) |

| alkanes, C14-17, chloro (85535-85-9) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 5.47 |

| isobutane (75-28-5) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 2.76 |

| butane (106-97-8) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 2.31 |

### 12.4. Mobility in soil

| dimethyl ether (115-10-6) | |
|---|---|
| Mobility in soil | 27 |

### 12.5. Results of PBT and vPvB assessment

| Component | |
|---|---|
| Substance(s) meeting the PBT criteria of REACH regulation, in accordance with Annex XIII | alkanes, C14-17, chloro (85535-85-9) |
| Substance(s) meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | alkanes, C14-17, chloro (85535-85-9) |

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Discharging into rivers and drains is forbidden.
Additional information : EWC codes listed are intended as a recommendation for users. Special waste.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

| ADR | IMDG | IATA |
|---|---|---|
| **14.1. UN number or ID number** | | |
| UN 1950 | UN 1950 | UN 1950 |
| **14.2. UN proper shipping name** | | |
| AEROSOLS | AEROSOLS | Aerosols, flammable |
| **Transport document description** | | |
| UN 1950 AEROSOLS, 2.1, (D) | UN 1950 AEROSOLS, 2.1 | UN 1950 Aerosols, flammable, 2.1 |
| **14.3. Transport hazard class(es)** | | |
| 2.1 | 2.1 | 2.1 |
|  |  |  |
| **14.4. Packing group** | | |
| Not applicable | Not applicable | Not applicable |
| **14.5. Environmental hazards** | | |
| Dangerous for the environment: No | Dangerous for the environment: No<br>Marine pollutant: No<br>EmS-No. (Fire): F-D<br>EmS-No. (Spillage): S-U | Dangerous for the environment: No |
| No supplementary information available | | |

### 14.6. Special precautions for user

**Overland transport**

| | | |
|---|---|---|
| Classification code (ADR) | : | 5F |
| Special provisions (ADR) | : | 190, 327, 344, 625 |
| Limited quantities (ADR) | : | 1l |
| Excepted quantities (ADR) | : | E0 |
| Packing instructions (ADR) | : | P207, LP200 |
| Special packing provisions (ADR) | : | PP87, RR6, L2 |
| Mixed packing provisions (ADR) | : | MP9 |
| Transport category (ADR) | : | 2 |
| Special provisions for carriage - Packages (ADR) | : | V14 |
| Tunnel restriction code (ADR) | : | D |

**Transport by sea**

| | | |
|---|---|---|
| Special provisions (IMDG) | : | 63, 190, 277, 327, 344, 381, 959 |
| Packing instructions (IMDG) | : | P207, LP200 |
| Special packing provisions (IMDG) | : | PP87, L2 |

**Air transport**

| | | |
|---|---|---|
| PCA packing instructions (IATA) | : | 203 |
| PCA max net quantity (IATA) | : | 75kg |
| CAO packing instructions (IATA) | : | 203 |
| CAO max net quantity (IATA) | : | 150kg |
| Special provisions (IATA) | : | A145, A167, A802 |
| ERG code (IATA) | : | 10L |

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

Not applicable

## SECTION 15: Regulatory information

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

**EU-Regulations**

**REACH Annex XVII (Restriction List)**

| EU restriction list (REACH Annex XVII) | | |
|---|---|---|
| **Reference code** | **Applicable on** | **Entry title or description** |
| 74. | PU S 300 B3 | Diisocyanates, O = C=N-R-N = C=O, with R an aliphatic or aromatic hydrocarbon unit of unspecified length |
| 56. | PU S 300 B3 | Methylenediphenyl diisocyanate (MDI) |

**REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

**REACH Candidate List (SVHC)**

Contains substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: alkanes, C14-17, chloro (EC 287-477-0, CAS 85535-85-9)

**PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

**POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

**Ozone Regulation (2024/590)**

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

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

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

**VOC Directive (2004/42)**

VOC content : 202.7 g/l (21,3 %)

**Seveso Directive (Disaster Risk Reduction)**

Seveso Additional information : FLAMMABLE AEROSOLS
'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids Category 1

**Explosives Precursors Regulation (EU 2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

**Drug Precursors Regulation (EC 273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out

## SECTION 16: Other information

| Abbreviations and acronyms: | |
|---|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| COD | Chemical oxygen demand (COD) |

| Abbreviations and acronyms: | |
|---|---|
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC-No. | European Community number |
| EC50 | Median effective concentration |
| EN | European Standard |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limit |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| ThOD | Theoretical oxygen demand (ThOD) |
| TLM | Median Tolerance Limit |
| VOC | Volatile Organic Compounds |
| CAS-No. | Chemical Abstracts Service number |
| N.O.S. | Not Otherwise Specified |
| vPvB | Very Persistent and Very Bioaccumulative |
| ED | Endocrine disruptor |

| Full text of H- and EUH-statements: | |
|---|---|
| Acute Tox. 4 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist) Category 4 |
| Acute Tox. 4 (Inhalation:vapour) | Acute toxicity (inhalation:vapour) Category 4 |
| Aerosol 1 | Aerosol, Category 1 |
| Aquatic Acute 1 | Hazardous to the aquatic environment – Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment – Chronic Hazard, Category 1 |
| Aquatic Chronic 4 | Hazardous to the aquatic environment – Chronic Hazard, Category 4 |
| Carc. 2 | Carcinogenicity, Category 2 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Flam. Gas 1 | Flammable gases, Category 1 |
| Lact. | Reproductive toxicity, Additional category, Effects on or via lactation |
| Press. Gas (Comp.) | Gases under pressure : Compressed gas |
| Press. Gas (Liq.) | Gases under pressure : Liquefied gas |

| Full text of H- and EUH-statements: | |
|---|---|
| Resp. Sens. 1 | Respiratory sensitisation, Category 1 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| Skin Sens. 1 | Skin sensitisation, Category 1 |
| STOT RE 2 | Specific target organ toxicity – Repeated exposure, Category 2 |
| STOT SE 3 | Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation |
| H220 | Extremely flammable gas. |
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: May burst if heated. |
| H280 | Contains gas under pressure; may explode if heated. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H351 | Suspected of causing cancer. |
| H362 | May cause harm to breast-fed children. |
| 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. |
| H413 | May cause long lasting harmful effects to aquatic life. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| EUH204 | Contains isocyanates. May produce an allergic reaction. |

| Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]: | | |
|---|---|---|
| Aerosol 1 | H222;H229 | On basis of test data |
| Acute Tox. 4 (Inhalation:dust,mist) | H332 | Calculation method |
| Skin Irrit. 2 | H315 | Calculation method |
| Eye Irrit. 2 | H319 | Calculation method |
| Resp. Sens. 1 | H334 | Calculation method |
| Skin Sens. 1 | H317 | Calculation method |
| Carc. 2 | H351 | Calculation method |
| Lact. | H362 | Calculation method |
| STOT SE 3 | H335 | Calculation method |
| STOT RE 2 | H373 | Calculation method |
| Aquatic Chronic 4 | H413 | Expert judgement |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.