# Arctic Seal 1K LF

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

### 1.1. Product identifier
**Trade name/designation:**

Arctic Seal 1K LF

### 1.2. Relevant identified uses of the substance or mixture and uses advised against
**Use of the substance/mixture:**
Emergency sealing

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

**Supplier (manufacturer/importer/only representative/downstream user/distributor):**


**Enke-Werk, Johannes Enke GmbH & Co. KG**
Hamburger Str. 16
40221 Düsseldorf
Germany
**Telephone:** +49 211 304074
**Telefax:** +49 211 393718
**E-mail:** info@enke-werk.de
**Website:** www.enke-werk.de

**E-mail (competent person):** sdb@enke-werk.de


### 1.4. Emergency telephone number
24h: Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture
**Classification according to Regulation (EC) No 1272/2008 [CLP]**
The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

### 2.2. Label elements
**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**
**Hazard statements:** none

| Supplemental hazard information | |
|---|---|
| EUH208 | Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine, trimethoxyvinylsilane, 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction. |
| EUH210 | Safety data sheet available on request. |

**Precautionary statements:** none

### 2.3. Other hazards
**Other adverse effects:**
The product hydrolyses quickly in the presence of water to: Polymers and methanol

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures
**Description:**
Mixture of silane-terminated polyurethanes and fillers

## Arctic Seal 1K LF

### Hazardous ingredients / Hazardous impurities / Stabilisers:

| Product identifiers | Substance name<br>Classification according to Regulation (EC) No 1272/2008 [CLP] | Concentration |
|---|---|---|
| CAS No.: 2768-02-7<br>EC No.: 220-449-8<br>Index No.: 014-049-00-0<br>REACH No.:<br>01-2119513215-52 | **trimethoxyvinylsilane**<br>Acute Tox. 4 (H332), Flam. Liq. 3 (H226), Skin Sens. 1B (H317)<br>  Warning<br>**Acute Toxicity Estimate**<br>ATE (oral) 7,120 mg/kg<br>ATE (dermal) > 2,000 mg/kg<br>ATE (inhalation, gases) 2,773 ppmV<br>ATE (inhalation, vapour) 16.8 mg/L<br>ATE (inhalation, dust/mist) 16.8 mg/L | 0 – < 1<br>weight-% |
| CAS No.: 1760-24-3<br>EC No.: 217-164-6<br>REACH No.:<br>01-2119970215-39 | **N-(3-(trimethoxysilyl)propyl)ethylenediamine**<br>Eye Dam. 1 (H318), STOT SE 3 (H335), Skin Sens. 1B (H317)<br>  Danger<br>**Acute Toxicity Estimate**<br>ATE (oral) 2,995 mg/kg<br>ATE (dermal) > 2,000 mg/kg | 0 – < 1<br>weight-% |
| CAS No.: 68413-24-1<br>EC No.: 500-210-7<br>REACH No.:<br>01-2119982994-15-0000 | **Glycidyl ether of 3-alkyl phenol**<br>STOT RE 2 (H373), Skin Sens. 1 (H317)<br>  Warning | 0 – ≤ 0.5<br>weight-% |
| CAS No.: 23432-65-7<br>EC No.: 457-690-5<br>REACH No.:<br>01-0000019371-74 | **[(Dimethoxymethylsilyl)methyl]carbamic acid methyl ester**<br>Repr. 2 (H361d, H361f)<br>  Warning | 0 – < 0.5<br>weight-% |
| CAS No.: 107-98-2<br>EC No.: 203-539-1<br>Index No.: 603-064-00-3<br>REACH No.:<br>01-2119457435-35 | **1-methoxypropan-2-ol**<br>Flam. Liq. 3 (H226), STOT SE 3 (H336)<br>  Warning<br>**Acute Toxicity Estimate**<br>ATE (oral) 4,016 mg/kg<br>ATE (dermal) 2,000 mg/kg<br>ATE (inhalation, vapour) 6,000 – 7,000 mg/L | 0 – ≤ 0.05<br>weight-% |
| CAS No.: 67-56-1<br>EC No.: 200-659-6<br>Index No.: 603-001-00-X<br>REACH No.:<br>01-2119433307-44-XXXX | **methanol**<br>Acute Tox. 3 (H331, H311, H301), Flam. Liq. 2 (H225),<br>STOT SE 1 (H370**)<br>  Danger<br>**Specific concentration limit (SCL)**<br>STOT SE 1; H370: C ≥ 10%<br>STOT SE 2; H371: 3% ≤ C < 10%<br>**Acute Toxicity Estimate**<br>ATE (oral) > 1,187 – 2,769 mg/kg<br>ATE (dermal) 17,100 mg/kg<br>ATE (inhalation, vapour) 3 mg/L<br>ATE (inhalation, dust/mist) 0.5 mg/L | 0 – < 0.005<br>weight-% |
| CAS No.: 127-19-5<br>EC No.: 204-826-4 | **N,N-dimethylacetamide (DMAC)**<br>Substance with a community workplace exposure limit.<br>*Candidate List of Substances of Very High Concern for Authorisation!* | 0 – ≤ 0.002<br>weight-% |
| CAS No.: 26530-20-1<br>EC No.: 247-761-7<br>Index No.: 613-112-00-5 | **2-octyl-2H-isothiazol-3-one**<br>Acute Tox. 2 (H330), Acute Tox. 3 (H311, H301),<br>Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318),<br>Skin Corr. 1 (H314), Skin Sens. 1A (H317)<br>  Danger EUH071<br>M-factor (acute): 100 M-factor (chronic): 100<br>**Specific concentration limit (SCL)**<br>Skin Sens. 1A; H317: C ≥ 0.0015%<br>**Acute Toxicity Estimate**<br>ATE (oral) 125 mg/kg<br>ATE (dermal) 311 mg/kg<br>ATE (inhalation, dust/mist) 0.27 mg/L | 0 – ≤ 0.001<br>weight-% |

*Full text of H- and EUH-phrases: see section 16.*

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General information:**
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended.

**Following inhalation:**
Provide fresh air. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

**In case of skin contact:**
Take off immediately all contaminated clothing and wash it before reuse.

**After eye contact:**
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

**Following ingestion:**
Rinse mouth. Let 1 glass of water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell.

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

No known symptoms to date.

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

Treat symptomatically. Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irrevers ible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media:**
Co-ordinate fire-fighting measures to the fire surroundings. Water mist, Powder, alcohol resistant foam, Carbon dioxide, Sand.

**Unsuitable extinguishing media:**
Full water jet

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

**Hazardous combustion products:**
In case of fire: Gases/vapours, toxic, Nitrogen oxides (NOx)

### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

### 5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

**Personal precautions:**
Avoid contact with skin, eyes and clothes. Avoid breathing dust/fume/gas/mist/vapours/spray. Remove persons to safety.

**Protective equipment:**
Wear protective gloves/protective clothing/eye protection/face protection.

### 6.1.2. For emergency responders

**Personal protection equipment:**

Personal protection equipment: see section 8

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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

**For containment:**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**For cleaning up:**

Solvents/Thinner

### 6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

### 6.5. Additional information

Use appropriate container to avoid environmental contamination.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

### Protective measures

**Advices on safe handling:**

Wear personal protection equipment (refer to section 8). Special danger of slipping by leaking/spilling product.

**Fire prevent measures:**

The product hydrolyses quickly in the presence of water to: Polymers and Methanol. Vapours can form explosive mixtures with air. No special measures are necessary.

**Measures to prevent aerosol and dust generation:**

Provide adequate ventilation as well as local exhaustion at critical locations.

### Advices on general occupational hygiene

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately. Wash hands and face before breaks and after work and take a shower if necessary.

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

**Technical measures and storage conditions:**

Keep container tightly closed in a cool, well-ventilated place.

**Hints on storage assembly:**

No special measures are necessary.

**Storage class (TRGS 510, Germany):** 10 - 13 – Other combustible and non-combustible substances

### 7.3. Specific end use(s)

**Recommendation:**

Emergency sealing

**Industrial sector specific solutions:**

SMP-based coating materials

**GISCODE:**

RSP20

# Arctic Seal 1K LF

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1. Occupational exposure limit values

| Limit value type (country of origin) | Substance name | ① Long-term occupational exposure limit value<br>② Short-term occupational exposure limit value<br>③ Instantaneous value<br>④ Monitoring and observation processes<br>⑤ Remark |
|---|---|---|
| SE | **Talc (Mg3H2(SiO3)4)**<br>CAS No.: 14807-96-6<br>EC No.: 238-877-9 | ① 2 mg/m³<br>⑤ (totalt damm) |
| SE | **Talc (Mg3H2(SiO3)4)**<br>CAS No.: 14807-96-6<br>EC No.: 238-877-9 | ① 1 mg/m³<br>⑤ (respirabel fraktion) |
| SE | **titanium dioxide**<br>CAS No.: 13463-67-7<br>EC No.: 236-675-5 | ① 5 mg/m³<br>⑤ (totalt damm) |
| SE | **Carbon black, amorphous**<br>CAS No.: 1333-86-4<br>EC No.: 215-609-9 | ① 3 mg/m³<br>⑤ (carbon black included) |
| SE<br>from 1 Jun 2016 | **1-methoxypropan-2-ol**<br>CAS No.: 107-98-2<br>EC No.: 203-539-1 | ① 50 ppm (190 mg/m³)<br>② 150 ppm (568 mg/m³)<br>⑤ (kan absorberas genom huden) |
| IOELV (EU) | **1-methoxypropan-2-ol**<br>CAS No.: 107-98-2<br>EC No.: 203-539-1 | ① 100 ppm (375 mg/m³)<br>② 150 ppm (568 mg/m³)<br>⑤ (may be absorbed through the skin) |
| SE | **trimethylolpropane**<br>CAS No.: 77-99-6<br>EC No.: 201-074-9 | ① 5 mg/m³ |
| SE | **methanol**<br>CAS No.: 67-56-1<br>EC No.: 200-659-6 | ① 200 ppm (250 mg/m³)<br>③ 250 ppm (350 mg/m³)<br>⑤ (kan absorberas genom huden) |
| IOELV (EU) | **methanol**<br>CAS No.: 67-56-1<br>EC No.: 200-659-6 | ① 200 ppm (260 mg/m³)<br>⑤ (may be absorbed through the skin) |
| SE | **N,N-dimethylacetamide (DMAC)**<br>CAS No.: 127-19-5<br>EC No.: 204-826-4 | ① 10 ppm (35 mg/m³)<br>② 20 ppm (70 mg/m³)<br>⑤ (kan absorberas genom huden) |
| BOELV (EU)<br>from 5 Apr 2022 | **N,N-dimethylacetamide (DMAC)**<br>CAS No.: 127-19-5<br>EC No.: 204-826-4 | ① 10 ppm (36 mg/m³)<br>② 20 ppm (72 mg/m³)<br>⑤ (may be absorbed through the skin) |

#### 8.1.2. Biological limit values

No data available

#### 8.1.3. DNEL-/PNEC-values

No data available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

No data available

#### 8.2.2. Personal protection equipment

**Eye/face protection:**

Eye glasses with side protection EN 166

**Skin protection:**
When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Our recommendation is as follows: Suitable materials for prolonged, direct contact (at least protection index 6, corresponding to> 480 minutes permeation time according to EN 374): Neoprene®, Viton®, PVC, butyl or nitrile rubber. Dispose of contaminated gloves. With proper, optimized operation, only short-term contact and liquid splashes are to be expected, therefore, according to DGUV Information 212-007, a glove with a minimum protection class of 1 (<10 min permeation time) is sufficient. It must be ensured that the gloves are changed at short notice in case of chemical contact.

Use of protective clothing. Tested protective gloves must be worn EN ISO 374 Suitable material: Breakthrough time: min In the case of wanting to use the gloves again, clean them before taking off and air them well. Breakthrough times and swelling properties of the material must be taken into consideration.

**Respiratory protection:**
In case of inadequate ventilation wear respiratory protection.

### 8.2.3. Environmental exposure controls
No data available

### 8.3. Additional information
The product hydrolyses quickly in the presence of water to: Polymers and methanol

## SECTION 9: Physical and chemical properties

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

### Appearance
**Physical state:** Liquid
**Form:** viscous
**Colour:** various
**Odour:** Menthol
**flammability:** No

### Safety relevant basis data

| Parameter | Value | at °C | ① Method<br>② Remark |
|---|---|---|---|
| pH | *not applicable* | | ② The substance is not soluble in water. Reacts with Water |
| Melting point | *No data available* | | |
| Freezing point | *No data available* | | |
| Initial boiling point and boiling range | *No data available* | | |
| Flash point | 132 °C | | |
| Evaporation rate | *No data available* | | |
| Auto-ignition temperature | *not applicable* | | |
| Upper/lower flammability or explosive limits | *No data available* | | |
| Vapour pressure | *No data available* | | |
| Vapour density | *No data available* | | |
| Density | 1.27 g/cm³ | 23 °C | |
| Bulk density | *not applicable* | | |
| Water solubility | practically insoluble | | |
| Dynamic viscosity | 1,500,000 – 2,500,000 cP | 20 °C | |
| Kinematic viscosity | *No data available* | | |

### 9.2. Other information
No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity
No hazardous reaction when handled and stored according to provisions.

### 10.2. Chemical stability
The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions
No known hazardous reactions.

### 10.4. Conditions to avoid
No data available

### 10.5. Incompatible materials
Reacts with Water, Acid , alkalines
Formation of: methanol

### 10.6. Hazardous decomposition products
In case of fire: Gases/vapours, toxic, methanol

## SECTION 11: Toxicological information

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

| |
|---|
| **trimethoxyvinylsilane** CAS No.: 2768-02-7 EC No.: 220-449-8 |
| **$LD_{50}$ oral:** 7,120 mg/kg (Rat) OECD 401 |
| **$LD_{50}$ dermal:** >2,000 mg/kg (Rabbit) |
| **$LC_{50}$ Acute inhalation toxicity (gas):** 2,773 ppmV 4 h (Rat) OECD 403 |
| **$LC_{50}$ Acute inhalation toxicity (vapour):** 16.8 mg/L 4 h (Rat) OECD 403 |
| **$LC_{50}$ Acute inhalation toxicity (dust/mist):** 16.8 mg/L 4 h (Rat) |
| **N-(3-(trimethoxysilyl)propyl)ethylenediamine** CAS No.: 1760-24-3 EC No.: 217-164-6 |
| **$LD_{50}$ oral:** 2,995 mg/kg (Rat) |
| **$LD_{50}$ dermal:** >2,000 mg/kg (Rabbit) |
| **1-methoxypropan-2-ol** CAS No.: 107-98-2 EC No.: 203-539-1 |
| **$LD_{50}$ oral:** 4,016 mg/kg (Rat) |
| **$LD_{50}$ dermal:** 2,000 mg/kg (Rat) |
| **$LC_{50}$ Acute inhalation toxicity (vapour):** 6,000 – 7,000 mg/L 4 h (Mouse) |
| **methanol** CAS No.: 67-56-1 EC No.: 200-659-6 |
| **$LD_{50}$ oral:** >1,187 – 2,769 mg/kg (Rat) |
| **$LD_{50}$ dermal:** 17,100 mg/kg (Rabbit) |
| **2-octyl-2H-isothiazol-3-one** CAS No.: 26530-20-1 EC No.: 247-761-7 |
| **ATE (oral)[1]:** 125 mg/kg |
| **ATE (dermal)[1]:** 311 mg/kg |
| **ATE (inhalation, dust/mist)[1]:** 0.27 mg/L |

*[1]: Acute Toxicity Estimate. Harmonised (legal) classification.*

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

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

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

**Skin corrosion/irritation:**
Based on available data, the classification criteria are not met.

**Serious eye damage/irritation:**
Based on available data, the classification criteria are not met.

**Respiratory or skin sensitisation:**
Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine, trimethoxyvinylsilane, 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.

**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.

**STOT-single exposure:**
Based on available data, the classification criteria are not met.

**STOT-repeated exposure:**
Based on available data, the classification criteria are not met.

**Aspiration hazard:**
Based on available data, the classification criteria are not met.

**Additional information:**
No data available

### 11.2. Information on other hazards

**Endocrine disrupting properties:**
The mixture does not contain substances >=0.1% of substances that have endocrine disrupting properties according to Regulation (EC) No. 1907/2006, Article 59(1) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605.

**Other information:**
The product hydrolyses quickly in the presence of water to: Polymers and methanol.
methanol: Symptoms/ delayed effects: Nausea, Vomiting, Headache, Dizziness, Impairment of vision. If swallowed there is a risk of blindness.

## SECTION 12: Ecological information

### 12.1. Toxicity

| **trimethoxyvinylsilane** CAS No.: 2768-02-7 EC No.: 220-449-8 |
|---|
| **$LC_{50}$:** 191 mg/L 4 d (fish, Oncorhynchusmykiss) OECD 203 |
| **$EC_{50}$:** 169 mg/L 2 d (crustaceans, Daphnia magna) OECD 202 |
| **NOEC:** 28 mg/L 21 d (crustaceans, Daphnia magna) OECD 211 |
| **$EC_{50}$:** >100 mg/L 3 d (Algae/water plant, Selenastrum capricornutum) OECD 201 |
| **NOEC:** 25 mg/L 3 d (Algae/water plant, Selenastrum capricornutum) |
| **$EC_{50}$:** >2,500 mg/L (Algae/water plant, activated sludge) OECD 209 |
| **$LC_{50}$:** 191 mg/L 4 d (fish, Oncorhynchus mykiss) |
| **NOEC:** 28.1 mg/L 21 d (crustaceans, Daphnia magna) OECD 211 |
| **LOEC:** 52.4 mg/L 21 d (crustaceans, Daphnia magna) OECD 211 |
| **$LC_{50}$:** 191 mg/L 4 d (fish, Regenbogenforelle (Oncorhynchus mykiss)) |
| **$ErC_{50}$:** >89 mg/L 3 d (Algae/water plant, Alge Pseudokirchneriella subcapitata) |
| **LOEC:** 52.4 mg/L 21 d (crustaceans, Daphnia magna) |
| **$ErC_{50}$:** >89 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata (Grünalge)) |
| **$ErC_{50}$:** >957 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus (Grünalge)) OECD 201 |
| **N-(3-(trimethoxysilyl)propyl)ethylenediamine** CAS No.: 1760-24-3 EC No.: 217-164-6 |
| **$LC_{50}$:** >100 mg/L (fish, Lepomis macrochirus) |
| **$EC_{50}$:** 87.4 mg/L 2 d (crustaceans, Daphnia magna) |
| **$EC_{50}$:** 8.8 mg/L 4 d (Algae/water plant, Pseudokirchneriella subcapitata) |
| **NOEC:** 3.1 mg/L (Algae/water plant, Pseudokirchneriella subcapitata) |

| |
|---|
| **methanol** CAS No.: 67-56-1 EC No.: 200-659-6 |
| **$LC_{50}$:** 15,400 mg/L 4 d (fish, blauer Sonnenbarsch (Lepomis macrochirus)) |
| **$EC_{50}$:** 12,700 mg/L 4 d (fish, blauer Sonnenbarsch (Lepomis macrochirus)) OECD 202 |
| **$EC_{50}$:** 18,260 mg/L 4 d (crustaceans, Daphnia magna) OECD 201 |
| **$ErC_{50}$:** 22,000 mg/L 4 d (Algae/water plant, Alge Pseudokirchneriella subcapitata) OECD 201 |
| **$LC_{50}$:** 28,100 mg/L 4 d (fish, Pimephales promelas) |
| **2-octyl-2H-isothiazol-3-one** CAS No.: 26530-20-1 EC No.: 247-761-7 |
| **$EC_{50}$:** 0.084 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus) OECD 201 |
| **$EC_{50}$:** 0.42 mg/L 2 d (crustaceans, Daphnie) OECD 202 |
| **$LC_{50}$:** 0.036 mg/L 4 d (fish, Regenbogenforelle) OECD 203 |
| **NOEC:** 0.002 mg/L 21 d (crustaceans, Daphnie) OECD 211 |
| **NOEC:** 0.022 mg/L 28 d (fish, Regenbogenforelle) OECD 210 |
| **NOEC:** 0.004 mg/L 3 d (Algae/water plant, Alge) OECD 201 |
| **$EC_{50}$:** 0.084 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus) OECD 201 |
| **$LC_{50}$:** 0.036 mg/L 4 d (fish, Regenbogenforelle) OECD 203 |

**Assessment/classification:**
The product has not been tested.

## 12.2. Persistence and degradability

| |
|---|
| **trimethoxyvinylsilane** CAS No.: 2768-02-7 EC No.: 220-449-8 |
| **Biodegradation:** Yes, rapidly |

**Additional information:**
The product has not been tested.

## 12.3. Bioaccumulative potential

| |
|---|
| **trimethoxyvinylsilane** CAS No.: 2768-02-7 EC No.: 220-449-8 |
| **Log $K_{OW}$:** 1.1 |
| **2-octyl-2H-isothiazol-3-one** CAS No.: 26530-20-1 EC No.: 247-761-7 |
| **Log $K_{OW}$:** 2.92 |

**Accumulation / Evaluation:**
The product has not been tested.The product has not been tested.

## 12.4. Mobility in soil

The product has not been tested.

## 12.5. Results of PBT and vPvB assessment

| |
|---|
| **trimethoxyvinylsilane** CAS No.: 2768-02-7 EC No.: 220-449-8 |
| **Results of PBT and vPvB assessment:** — |
| **N-(3-(trimethoxysilyl)propyl)ethylenediamine** CAS No.: 1760-24-3 EC No.: 217-164-6 |
| **Results of PBT and vPvB assessment:** — |
| **Glycidyl ether of 3-alkyl phenol** CAS No.: 68413-24-1 EC No.: 500-210-7 |
| **Results of PBT and vPvB assessment:** — |
| **[(Dimethoxymethylsilyl)methyl]carbamic acid methyl ester** CAS No.: 23432-65-7 EC No.: 457-690-5 |
| **Results of PBT and vPvB assessment:** — |
| **1-methoxypropan-2-ol** CAS No.: 107-98-2 EC No.: 203-539-1 |
| **Results of PBT and vPvB assessment:** — |
| **methanol** CAS No.: 67-56-1 EC No.: 200-659-6 |
| **Results of PBT and vPvB assessment:** — |
| **N,N-dimethylacetamide (DMAC)** CAS No.: 127-19-5 EC No.: 204-826-4 |
| **Results of PBT and vPvB assessment:** — |
| **2-octyl-2H-isothiazol-3-one** CAS No.: 26530-20-1 EC No.: 247-761-7 |
| **Results of PBT and vPvB assessment:** — |

The mixture contains >= 0.1 % substances meeting the vPvB and PBT criteria according to Regulation (EC) No 1907/2006, Annex XIII. See SECTION 3 in this safety data sheet.

### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

### 12.7. Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. Adhering to the official regulations, it can be disposed of in appropiate incinerator. Cured residual material can be disposed of with household waste .

Disposal of packaging:
Containers have to be emptied completely and free of drops after final product removal. Emptied packages can be returned to the partners of Kreislaufsystem Blechverpackungen Stahl (Recycling system for metal containers). Collection points are provided by the ENKE company as user of the mark.

### 13.1.1. Product/Packaging disposal

### Waste codes/waste designations according to EWC/AVV

**Waste code product**

| | |
|---|---|
| 08 04 10 | waste adhesives and sealants other than those mentioned in 08 04 09 |

### Waste treatment options

**Appropriate disposal / Product:**
Consult the appropriate local waste disposal expert about waste disposal.

**Appropriate disposal / Package:**
Non-contaminated packages may be recycled.

## SECTION 14: Transport information

| Land transport (ADR/RID) | Inland waterway craft (ADN) | Sea transport (IMDG) | Air transport (ICAO-TI / IATA-DGR) |
|---|---|---|---|
| **14.1. UN number or ID number** | | | |
| No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. |
| **14.2. UN proper shipping name** | | | |
| No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. |
| **14.3. Transport hazard class(es)** | | | |
| not relevant | not relevant | not relevant | not relevant |
| **14.4. Packing group** | | | |
| not relevant | not relevant | not relevant | not relevant |
| **14.5. Environmental hazards** | | | |
| not relevant | not relevant | not relevant | not relevant |
| **14.6. Special precautions for user** | | | |
| not relevant | not relevant | not relevant | not relevant |

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

No data available

## SECTION 15: Regulatory information

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

#### 15.1.1. EU legislation

**Restrictions on use:**

75

**Other regulations (EU):**

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: This product is not assigned to a hazard category.

Named dangerous substances:
• Methanol
To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

**Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:**

Volatile organic compounds (VOC) content in percent by weight: < 0.3 weight-%

#### 15.1.2. National regulations

No data available

### 15.2. Chemical Safety Assessment

No data available

## SECTION 16: Other information

### 16.1. Indication of changes

No data available

### 16.2. Abbreviations and acronyms

| | |
|---|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| 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 |
| CAS | Chemical Abstracts Service |
| CLP | Classification, Labelling and Packaging |
| DIN | German Institute for Standardization / German Industrial Standard |
| DNEL | derived no-effect level |
| $EC_{50}$ | Effective Concentration 50% |
| EN | European Standard |
| ES | Exposure scenario |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods |
| IMO | International Maritime Organization |
| ISO | International Standards Organisation |
| KG | body weight |
| $LC_{50}$ | Lethal (fatal) Concentration 50% |
| $LD_{50}$ | Lethal (fatal) Dose 50% |
| MAK | Maximum concentration in the workplace air (CH) |
| NFPA | National Fire Protection Association |
| NIOSH | National Institute for Occupational Safety & Health |
| NOEC | No Observed Effect Concentration |
| OECD | Organisation for Economic Cooperation and Development |
| OEL | Threshold Limit Value |
| OSHA | Occupational Safety & Health Administration |
| PBT | persistent and bioaccumulative and toxic |
| PNEC | Predicted No Effect Concentration |
| REACH | Registration, Evaluation and Authorization of Chemicals |
| RID | Dangerous goods regulations for transport by rail |
| SCL | Specific concentration limit |

TRGS Technische Regeln für Gefahrstoffe
UN United Nations

### 16.3. Key literature references and sources for data
No data available

### 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]
The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

### 16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

| **Hazard statements** | |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H301 | Toxic if swallowed. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H330 | Fatal if inhaled. |
| H331 | Toxic if inhaled. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H361d | Suspected of damaging the unborn child. |
| H361f | Suspected of damaging fertility. |
| H370 | Causes damage to organs. |
| H371 | May cause damage to organs. |
| 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. |

| **Supplemental hazard information** | |
|---|---|
| EUH071 | Corrosive to the respiratory tract. |

### 16.6. Training advice
No data available

### 16.7. Additional information
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.
The current version of this safety data sheet is available on our website www.enke-werk.de