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

1.1. Product identifier

Product form: Mixture
Physical state: Liquid
Product name: TRIMETHOXYSILYLPROPYL MODIFIED (POLYETHYLENIMINE), 50% in isopropanol
Product code: SSP-060
Synonyms: AZIRIDINE, POLYMER WITH (3-CHLOROPROPYL)TRIMETHOXYSILANE; POLYETHYLENEIMINE, [N-(TRI(ISOPROPOXY, METHOXY)SILYLPROPYL)-HYDROCHLORIDES
Chemical family: ORGANOSILANE

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

1.2.1. Relevant identified uses

Use of the substance/mixture: Chemical intermediate

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

GELEST, INC.
11 East Steel Road
Morrisville, PA 19067
USA
T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST
info@gelest.com - www.gelest.com

GELEST INC.
Fritz-Klatte-Strasse 8
65933 Frankfurt
Germany
T +49 (0) 69 3535106-500 - F +49 (0) 69 3535106-501 - (M-F): 8:00 AM - 4:00 PM
info@gelestd.de - www.gelest.de

1.4. Emergency telephone number

Emergency number: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 2: H225
Skin corrosion/irritation, Category 2: H315
Serious eye damage/eye irritation, Category 2: H319
Specific target organ toxicity – Single exposure, Category 3, Narcosis: H336

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP):

Signal word (CLP): Danger
TRIMETHOXYSILYLPROPYL MODIFIED (POLYETHYLENIMINE), 50% in isopropanol
Safety Data Sheet

Hazardous ingredients: Isopropanol

Hazard statements (CLP):
- H225 - Highly flammable liquid and vapour.
- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP):
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 - Keep container tightly closed.
- P240 - Ground and bond container and receiving equipment.
- P241 - Use explosion-proof electrical/ventilating/lighting equipment.
- P261 - Avoid breathing vapours.
- P264 - Wash hands thoroughly after handling.

2.3. Other hazards
Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropanol</td>
<td>(CAS-No.) 67-63-0</td>
<td>50</td>
<td>Flam. Liq. 2, H225 Eye Irrit. 2, H315 STOT SE 3, H336</td>
</tr>
<tr>
<td>(EC-No.) 200-661-7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(EC Index-No.) 603-117-00-0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trimethoxysilylpropyl modified (polyethylenimine)</td>
<td>(CAS-No.) 136856-91-2</td>
<td>50</td>
<td>Skin Irrit. 2, H315 Eye Irrit. 2, H319</td>
</tr>
</tbody>
</table>

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: Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.

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

First-aid measures after skin contact: Wash with plenty of water/…. Get medical advice/attention.

First-aid measures after eye contact: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion: Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/effects after inhalation: May cause drowsiness or dizziness. May cause irritation to the respiratory tract. Overexposure may cause: Cough. Headache. Nausea.

Symptoms/effects after skin contact: Causes skin irritation.

Symptoms/effects after eye contact: Causes serious eye irritation.

Symptoms/effects after ingestion: May be harmful if swallowed. Oral toxicity is associated with isopropanol or methanol, the solvent and a hydrolysis product which causes nausea, vomiting, headache, visual effects including blindness. Onset of symptoms may be delayed up to 48 hours.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture
Fire hazard: Highly flammable liquid and vapour. Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.
TRIMETHOXYSILYLPROPYL MODIFIED (POLYETHYLENIMINE), 50% in isopropanol
Safety Data Sheet

5.3. Advice for firefighters
Firefighting instructions : Use water spray to cool exposed surfaces. Exercise caution when fighting any chemical fire.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all eye and skin contact and do not breathe vapour and mist.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
General measures : Remove ignition sources. Use special care to avoid static electric charges.
6.1.1. For non-emergency personnel
Emergency procedures : Evacuate unnecessary personnel.
6.1.2. For emergency responders
Protective equipment : Equip cleanup crew with proper protection.

6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal. Use only non-sparking tools.

6.4. Reference to other sections
See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage
7.1. Precautions for safe handling
Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapour and mist. Use only outdoors or in a well-ventilated area. Provide good ventilation in process area to prevent formation of vapour. Containers and transfer lines require grounding during use. Take precautionary measures against static discharge. Use only non-sparking tools.
Hygiene measures : Wash contaminated clothing before reuse. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical equipment.
Storage conditions : Keep container tightly closed.
Storage area : Store in a well-ventilated place. Store away from heat.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection
8.1. Control parameters

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>MAK (OEL TWA)</td>
<td>500 mg/m³</td>
</tr>
<tr>
<td></td>
<td>MAK (OEL TWA) [ppm]</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Austria</td>
<td>MAK (OEL STEL)</td>
<td>2000 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2000 mg/m³ (STEL for large casting valid till 12/31/2013)</td>
</tr>
<tr>
<td>Austria</td>
<td>MAK (OEL STEL) [ppm]</td>
<td>800 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>800 ppm (STEL for large casting valid till 12/31/2013)</td>
</tr>
<tr>
<td>Belgium</td>
<td>OEL TWA</td>
<td>500 mg/m³</td>
</tr>
<tr>
<td>Belgium</td>
<td>OEL TWA [ppm]</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Belgium</td>
<td>OEL STEL</td>
<td>1000 mg/m³</td>
</tr>
<tr>
<td>Belgium</td>
<td>OEL STEL [ppm]</td>
<td>400 ppm</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>OEL TWA</td>
<td>980 mg/m³</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>OEL STEL</td>
<td>1225 mg/m³</td>
</tr>
<tr>
<td>France</td>
<td>VLE (OEL C/STEL)</td>
<td>980 mg/m³</td>
</tr>
<tr>
<td>France</td>
<td>VLE (OEL C/STEL) [ppm]</td>
<td>400 ppm</td>
</tr>
</tbody>
</table>

print date: 07/07/2022
EN (English)
Sds Id: SSP-060
### Isopropanol (67-63-0)

<table>
<thead>
<tr>
<th>Location</th>
<th>Standard</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>AGW (OEL TWA) [1]</td>
<td>500 mg/m³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)</td>
</tr>
<tr>
<td>Germany</td>
<td>AGW (OEL TWA) [2]</td>
<td>200 ppm (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)</td>
</tr>
<tr>
<td>Germany</td>
<td>Biological limit value</td>
<td>25 mg/l (Medium: whole blood - Time: end of shift - Parameter: Acetone) 25 mg/l (Medium: urine - Time: end of shift - Parameter: Acetone)</td>
</tr>
<tr>
<td>Greece</td>
<td>OEL TWA</td>
<td>980 mg/m³</td>
</tr>
<tr>
<td>Greece</td>
<td>OEL TWA [ppm]</td>
<td>400 ppm</td>
</tr>
<tr>
<td>Greece</td>
<td>OEL STEL</td>
<td>1225 mg/m³</td>
</tr>
<tr>
<td>Greece</td>
<td>OEL STEL [ppm]</td>
<td>500 ppm</td>
</tr>
<tr>
<td>Italy - Portugal - USA ACGIH</td>
<td>ACGIH OEL TWA [ppm]</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Italy - Portugal - USA ACGIH</td>
<td>ACGIH OEL STEL [ppm]</td>
<td>400 ppm</td>
</tr>
<tr>
<td>Latvia</td>
<td>OEL TWA</td>
<td>350 mg/m³</td>
</tr>
<tr>
<td>USA IDLH</td>
<td>IDLH [ppm]</td>
<td>2000 ppm (10% LEL)</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL TWA</td>
<td>980 mg/m³</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL TWA [ppm]</td>
<td>400 ppm</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL STEL</td>
<td>1225 mg/m³</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL STEL [ppm]</td>
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</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL TWA [1]</td>
<td>980 mg/m³</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL TWA [2]</td>
<td>400 ppm</td>
</tr>
<tr>
<td>Spain</td>
<td>VLA-ED (OEL TWA) [1]</td>
<td>500 mg/m³ (it is prohibited the partial or complete commercialization or use of this substance as a phytosanitary or biocide compound)</td>
</tr>
<tr>
<td>Spain</td>
<td>VLA-ED (OEL TWA) [2]</td>
<td>200 ppm (it is prohibited the partial or complete commercialization or use of this substance as a phytosanitary or biocide compound)</td>
</tr>
<tr>
<td>Spain</td>
<td>VLA-EC (OEL STEL)</td>
<td>1000 mg/m³</td>
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<tr>
<td>Switzerland</td>
<td>KZGW (OEL STEL)</td>
<td>1000 mg/m³</td>
</tr>
<tr>
<td>Switzerland</td>
<td>KZGW (OEL STEL) [ppm]</td>
<td>400 ppm</td>
</tr>
<tr>
<td>Switzerland</td>
<td>MAK (OEL TWA) [1]</td>
<td>500 mg/m³</td>
</tr>
<tr>
<td>Switzerland</td>
<td>MAK (OEL TWA) [2]</td>
<td>200 ppm</td>
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<td>United Kingdom</td>
<td>WEL TWA (OEL TWA) [1]</td>
<td>999 mg/m³</td>
</tr>
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<td>United Kingdom</td>
<td>WEL TWA (OEL TWA) [2]</td>
<td>400 ppm</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>WEL STEL (OEL STEL)</td>
<td>1250 mg/m³</td>
</tr>
<tr>
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<td>WEL STEL (OEL STEL) [ppm]</td>
<td>500 ppm</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>PEL (OEL TWA)</td>
<td>500 mg/m³</td>
</tr>
<tr>
<td>Denmark</td>
<td>OEL TWA [1]</td>
<td>490 mg/m³</td>
</tr>
<tr>
<td>Denmark</td>
<td>OEL TWA [2]</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Finland</td>
<td>HTP (OEL TWA) [1]</td>
<td>500 mg/m³</td>
</tr>
<tr>
<td>Finland</td>
<td>HTP (OEL TWA) [2]</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Finland</td>
<td>HTP (OEL STEL)</td>
<td>620 mg/m³</td>
</tr>
<tr>
<td>Finland</td>
<td>HTP (OEL STEL) [ppm]</td>
<td>250 ppm</td>
</tr>
<tr>
<td>Hungary</td>
<td>AK (OEL TWA)</td>
<td>500 mg/m³</td>
</tr>
<tr>
<td>Hungary</td>
<td>CK (OEL STEL)</td>
<td>2000 mg/m³</td>
</tr>
<tr>
<td>Ireland</td>
<td>OEL TWA [2]</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Ireland</td>
<td>OEL STEL [ppm]</td>
<td>400 ppm</td>
</tr>
<tr>
<td>Lithuania</td>
<td>IPRV (OEL TWA)</td>
<td>350 mg/m³</td>
</tr>
<tr>
<td>Lithuania</td>
<td>IPRV (OEL TWA) [ppm]</td>
<td>150 ppm</td>
</tr>
<tr>
<td>Lithuania</td>
<td>TPRV (OEL STEL)</td>
<td>600 mg/m³</td>
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</table>
### Isopropanol (67-63-0)

<table>
<thead>
<tr>
<th>Country</th>
<th>Exposure Limit</th>
<th>Unit</th>
</tr>
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<tbody>
<tr>
<td>Lithuania</td>
<td>TPRV (OEL STEL) [ppm]</td>
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</tr>
<tr>
<td>Norway</td>
<td>Grenseverdi (OEL TWA) [1]</td>
<td>245 mg/m³</td>
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<td>Grenseverdi (OEL TWA) [2]</td>
<td>100 ppm</td>
</tr>
<tr>
<td>Norway</td>
<td>Korttidsverdi (OEL STEL)</td>
<td>245 mg/m³</td>
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<tr>
<td>Norway</td>
<td>Korttidsverdi (OEL STEL) [ppm]</td>
<td>100 ppm</td>
</tr>
<tr>
<td>Poland</td>
<td>NDS (OEL TWA)</td>
<td>900 mg/m³</td>
</tr>
<tr>
<td>Poland</td>
<td>NDScH (OEL STEL)</td>
<td>1200 mg/m³</td>
</tr>
<tr>
<td>Romania</td>
<td>OEL TWA</td>
<td>200 mg/m³</td>
</tr>
<tr>
<td>Romania</td>
<td>OEL TWA [ppm]</td>
<td>81 ppm</td>
</tr>
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<td>OEL STEL</td>
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</tr>
<tr>
<td>Romania</td>
<td>OEL STEL [ppm]</td>
<td>203 ppm</td>
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<tr>
<td>Slovakia</td>
<td>NPHV (OEL TWA) [1]</td>
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</tr>
<tr>
<td>Slovakia</td>
<td>NPHV (OEL TWA) [2]</td>
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</tr>
<tr>
<td>Slovakia</td>
<td>NPHV (OEL C)</td>
<td>1000 mg/m³</td>
</tr>
<tr>
<td>Sweden</td>
<td>NGV (OEL TWA)</td>
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<td>NGV (OEL TWA) [ppm]</td>
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<td>Sweden</td>
<td>KTV (OEL STEL)</td>
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</tr>
<tr>
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<td>KTV (OEL STEL) [ppm]</td>
<td>250 ppm</td>
</tr>
<tr>
<td>Canada (Quebec)</td>
<td>VECID (OEL STEL)</td>
<td>1230 mg/m³</td>
</tr>
<tr>
<td>Canada (Quebec)</td>
<td>VECID (OEL STEL) [ppm]</td>
<td>500 ppm</td>
</tr>
<tr>
<td>Canada (Quebec)</td>
<td>VEMP (OEL TWA)</td>
<td>985 mg/m³</td>
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<tr>
<td>Canada (Quebec)</td>
<td>VEMP (OEL TWA) [ppm]</td>
<td>400 ppm</td>
</tr>
<tr>
<td>Australia</td>
<td>OES TWA [1]</td>
<td>983 mg/m³</td>
</tr>
<tr>
<td>Australia</td>
<td>OES TWA [2]</td>
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<td>Australia</td>
<td>OES STEL</td>
<td>1230 mg/m³</td>
</tr>
<tr>
<td>Australia</td>
<td>OES STEL [ppm]</td>
<td>500 ppm</td>
</tr>
<tr>
<td>Portugal</td>
<td>OEL TWA</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Portugal</td>
<td>OEL STEL [ppm]</td>
<td>400 ppm</td>
</tr>
<tr>
<td>Portugal</td>
<td>OEL chemical category</td>
<td>A4 - Not Classifiable as a Human Carcinogen</td>
</tr>
</tbody>
</table>

### 8.2. Exposure controls

**Appropriate engineering controls:**

Provide local exhaust or general room ventilation.

**Personal protective equipment:**

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

**Hand protection:**

Neoprene or nitrile rubber gloves

**Eye protection:**

Chemical goggles. Contact lenses should not be worn

**Skin and body protection:**

Wear suitable protective clothing

**Respiratory protection:**

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified combination organic vapor - amine gas (brown cartridge) respirator.

### SECTION 9: Physical and chemical properties

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

- **Physical state:** Liquid
- **Appearance:** Clear solution.
- **Molecular mass:** 1500 – 1800 g/mol
TRIMETHOXYSILYLPROPYL MODIFIED (POLYETHYLENIMINE), 50% in isopropanol  
Safety Data Sheet

**SECTION 10: Stability and reactivity**

10.1. Reactivity
No additional information available

10.2. Chemical stability
Stable in sealed containers stored under a dry inert atmosphere.

10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid
Heat. Open flame. Sparks.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Methanol. Organic amine vapors.

**SECTION 11: Toxicological information**

11.1. Information on toxicological effects
Acute toxicity: Not classified

<table>
<thead>
<tr>
<th>Isopropanol (67-63-0)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>1870 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>4059 mg/kg</td>
</tr>
<tr>
<td>LC50 Inhalation - Rat</td>
<td>72600 mg/m³ (Exposure time: 4 h)</td>
</tr>
<tr>
<td>ATE CLP (oral)</td>
<td>4396 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE CLP (dermal)</td>
<td>12800 mg/kg bodyweight</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/irritation: Causes serious eye irritation.
Respiratory or skin sensitisation: Not classified
TRIMETHOXYSILYLPROPYL MODIFIED (POLYETHYLENIMINE), 50% in isopropanol
Safety Data Sheet

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

<table>
<thead>
<tr>
<th>Isopropanol (67-63-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
</tr>
</tbody>
</table>

Reproductive toxicity : Not classified
STOT-single exposure : May cause drowsiness or dizziness.
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Symptoms/effects after inhalation : May cause drowsiness or dizziness. May cause irritation to the respiratory tract. Overexposure may cause: Cough. Headache. Nausea.
Symptoms/effects after skin contact : Causes skin irritation.
Symptoms/effects after eye contact : Causes serious eye irritation.
Symptoms/effects after ingestion : May be harmful if swallowed. Oral toxicity is associated with isopropanol or methanol, the solvent and a hydrolysis product which causes nausea, vomiting, headache, visual effects including blindness. Onset of symptoms may be delayed up to 48 hours.

SECTION 12: Ecological information

12.1. Toxicity
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

<table>
<thead>
<tr>
<th>Isopropanol (67-63-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 - Fish [1]</td>
</tr>
<tr>
<td>EC50 - Crustacea [1]</td>
</tr>
<tr>
<td>LC50 - Fish [2]</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects
Other adverse effects : This substance may be hazardous to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Product/Packaging disposal recommendations : May be incinerated. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.
Additional information : Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

14.1. UN number
In accordance with ADR / IMDG / IATA / ADN / RID

| UN-No. (ADR) | 1993 |
| UN-No. (IMDG) | 1993 |
| UN-No. (IATA) | 1993 |
| UN-No. (ADN) | 1993 |
| UN-No. (RID) | 1993 |
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### 14.2. UN proper shipping name

| Proper Shipping Name (ADR) | FLAMMABLE LIQUID, N.O.S. |
| Proper Shipping Name (IMDG) | FLAMMABLE LIQUID, N.O.S. |
| ProperShipping Name (IATA) | Flammable liquid, n.o.s. |
| Proper Shipping Name (ADN) | FLAMMABLE LIQUID, N.O.S. |
| Transport document description (ADR) | UN 1993 FLAMMABLE LIQUID, N.O.S. (TRIMETHOXYSILYLPROPYL MODIFIED (POLYETHYLENIMINE), 50% in isopropanol), 3, II, (D/E) |
| Transport document description (IMDG) | UN 1993 FLAMMABLE LIQUID, N.O.S. (TRIMETHOXYSILYLPROPYL MODIFIED (POLYETHYLENIMINE), 50% in isopropanol), 3, II |
| Transport document description (IATA) | UN 1993 Flammable liquid, n.o.s. (TRIMETHOXYSILYLPROPYL MODIFIED (POLYETHYLENIMINE), 50% in isopropanol), 3, II |
| Transport document description (ADN) | UN 1993 FLAMMABLE LIQUID, N.O.S. (TRIMETHOXYSILYLPROPYL MODIFIED (POLYETHYLENIMINE), 50% in isopropanol), 3, II |
| Transport document description (RID) | UN 1993 FLAMMABLE LIQUID, N.O.S. (TRIMETHOXYSILYLPROPYL MODIFIED (POLYETHYLENIMINE), 50% in isopropanol), 3, II |

### 14.3. Transport hazard class(es)

#### ADR
- Transport hazard class(es) (ADR): 3
- Danger labels (ADR): 3

#### IMDG
- Transport hazard class(es) (IMDG): 3
- Danger labels (IMDG): 3

#### IATA
- Transport hazard class(es) (IATA): 3
- Danger labels (IATA): 3

#### ADN
- Transport hazard class(es) (ADN): 3
- Danger labels (ADN): 3

#### RID
- Transport hazard class(es) (RID): 3
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Danger labels (RID) : 3

14.4. Packing group
Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards
Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport
Classification code (ADR) : F1
Special provisions (ADR) : 274, 601, 640C
Limited quantities (ADR) : 1l
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P001
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions (ADR) : TP1, TP8, TP28
Tank code (ADR) : L1.5BN
Vehicle for tank carriage : FL
Transport category (ADR) : 2
Special provisions for carriage - Operation (ADR) : S2, S20
Hazard identification number (Kemler No.) : 33
Orange plates : 

Tunnel restriction code (ADR) : D/E

- Transport by sea
Special provisions (IMDG) : 274
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP1, TP8, TP28
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-E
Stowage category (IMDG) : B

- Air transport
PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
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PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
Special provisions (IATA) : A3
ERG code (IATA) : 3H

- Inland waterway transport
Classification code (ADN) : F1
Special provisions (ADN) : 274, 601, 640C
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 1

- Rail transport
Classification code (RID) : F1
Special provisions (RID) : 274, 601, 640C
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2
Packing instructions (RID) : P001
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T7
Portable tank and bulk container special provisions (RID) : TP1, TP8, TP28
Tank codes for RID tanks (RID) : L1.5BN
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE7
Hazard identification number (RID) : 33

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

Contains no REACH Annex XIV substances

% Volatiles : > 45 °C

15.1.2. National regulations

Germany
Regulatory reference : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)
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Hazardous Incident Ordinance (12. BlmSchV) : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands
SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

Denmark
Class for fire hazard : Class I-1
Store unit : 1 liter
Classification remarks : F <Flam. Liq. 2>; Emergency management guidelines for the storage of flammable liquids must be followed

15.2. Chemical safety assessment
No additional information available

SECTION 16: Other information

Abbreviations and acronyms:
Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor

Other information : Prepared by safety and environmental affairs.

Full text of H- and EUH-statements:

Eye Irrit. 2 Serious eye damage/eye irritation, Category 2
Flam. Liq. 2 Flammable liquids, Category 2
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
Skin Irrit. 2 Skin corrosion/irritation, Category 2
STOT SE 3 Specific target organ toxicity – Single exposure, Category 3, Narcosis

SDS EU (REACH Annex II) - Custom

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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