# Safety Data Sheet(SDS): PU Foam

## 1. IDENTIFICATION OF THE CHEMICAL AND SUPPLIER

**Product Name:** Polyacrylate Sealant

**Recommended use of the chemical and restrictions on use**

**Recommended Use:** Bonding and sealing

**Advised Against:** At this moment in time we do not have information on use restrictions. They will be included in this document when available.

## 2. HAZARDS IDENTIFICATION

**GHS Classification**

| | |
|---|---|
| Acute Tox.: | Cate.4 |
| Aerosols: | Cate.2 |

**GHS Labelling**

Hazard pictograms 

Signal Word Warning

**Hazard Statements**

| | |
|---|---|
| H223 | Flammable aerosol. |
| H332 | Harmful if inhaled. |

**Precautionary Statements**

**Prevention**

| | |
|---|---|
| P210 | Keep away from heat/sparks/open flames/hot surfaces.-No smoking. |
| P211 | Do not spray on an open flame or other ignition source. |
| P251 | Pressurized container: Do not pierce or burn, even after use. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P271 | Use only outdoors or in a well-ventilated area. |

**Response**

| | |
|---|---|
| P304+P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P312 | Call a POISON CENTER or doctor/physician if you feel unwell. |
| P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F. |

**Hazard description**

**Physical and chemical hazards**

Flammable, risk of explosion.

**Health hazards**

| | |
|---|---|
| Inhaled | Inhalation of the product during the course of normal handling, these may be harmful. |
| Ingestion | Due to physical form of this product, considered an unlikely route of entry in commercial/industrial environments. |
| Skin Contact | Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. |
| Eye | This product may cause temporary discomfort following direct contact with the eye. |

**Environmental hazards**

Environmental hazar Please refer to Section 12 of the SDS.

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/mixture**

Mixture

**Components**

| Component | CAS-No. | Concentration(Wt%) | Classification |
|---|---|---|---|
| Dimethyl ether | 115-10-6 | 10~30 | Flam. Gas 1 H220; Compressed gas H280 |
| Polyethylene-polypropylene glycol | 9003-11-6 | ≥30 | Not classified |
| Polymethylene polyphenyl polyisocyanate | 9016-87-9 | ≥30 | Acute Tox. 4 H332 |

## 4. FIRST AID MEASURES

**Description of necessary first aid measures**

| | |
|---|---|
| General advice | Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable. |
| Skin contact | Take off contaminated clothing and shoes immediately.<br>Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable. |
| Ingestion | DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately. |
| Inhalation | Move victim into fresh air. If breathing is difficult, give oxygen. |

**Most important symptoms and effects, both acute and delayed**

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. May cause an allergic skin reaction, serious eye irritation, damages to organs through prolonged or repeated exposure.
Ingestion is likely to be harmful or have adverse effects.

**Protection of first-aiders**

First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.

Ensure that medical personnel are aware of the substance involved.

Take precautions to protect themselves and prevent spread of contamination.

**Notes to physician**

Treat symptomatically and supportively.

Symptoms may be delayed.

## 5. FIREFIGHTING MEASURES

**Extinguishing media**

| | |
|---|---|
| Suitable extinguishing media | Small Fire: Dry chemical or CO2; Large Fire: Water spray or fog. |
| Unsuitable extinguishing media | Don't use water spray directly in the leak or safety equipment, otherwise may cause icing. |

**Specific hazards arising from the substance or mixture**

Flammable: will be easily ignited by heat, sparks or flames.
Will form explosive mixtures with air.
Fire exposed containers may vent contents through pressure relief valves thereby increasing fire intensity and/ or vapour concentration.
Vapours may travel to source of ignition and flash back.
Development of hazardous combustion gases or vapor possible in the event of fire.
May expansion or decompose explosively when heated or involved in fire.

**Advice for firefighters**

As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
Fight fire from a safe distance, with adequate cover.
Prevent fire extinguishing water from contaminating surface water or the ground water system.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Avoid breathing vapours and contacting with skin and eye.
Beware of vapours accumulating to form explosive concentrations.
Vapours can accumulate in low areas.
Emergency personnel wear positive pressure self-contained breathing apparatus. Wear protective and anti-static clothing. Wear chemical impermeable gloves.
Use personal protective equipment. Keep unprotected persons away.
Follow safe handling advice and personal protective equipment recommendations.
Avoid contact with skin, eyes an

**Environmental precautions**

Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

**Methods and materials for containment and cleaning up**

Soak up with inert absorbent material.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.
Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are appl

**Reference to other sections**

See Section 7, Ssection 8, Section 13, Senction 15 for more information.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**

Avoid inhalation of vapors.
Use only non-sparking tools.
To prevent fire caused by electrostatic discharge steam, equipment on all metal parts should be grounded.
Use explosion proof equipment.
Handling is performed in a well ventilated place.
Wear suitable protective equipment.
Avoid contact with skin and eyes.
Keep away from heat/sparks/open flames/ hot surfaces.
Take care to prevent spills, waste and minimize release to the environment.
Persons susceptible to allergic reactions sho

**7.2 Precautions for storage**

Keep containers tightly closed.
Keep containers in a dry, cool and well-ventilated place.
Keep away from heat/sparks/open flames/hot surfaces.
Store away from incompatible materials and foodstuff containers.
Storage temperature should not be higher than 30 °C.

**7.3 Materials to avoid**

Strong oxidizing agents, Organic peroxides, Acids, Foodstuffs, Explosives, Hot, Heat.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Occupational Exposure limit values**

| Component | CAS No. | PC-TWA/ppm | PC-TWA/mg/m3 | PC-STEL/ppm | PC-STEL/mg/m3 | | Country/Region |
|---|---|---|---|---|---|---|---|
| Dimethyl ether | 115-10-6 | | 1000 | 1920 | | | Latvia |
| Dimethyl ether | 115-10-6 | | 400 | 766 | 500 | 958 | New Zealand |
| Polymethylene polyphenyl polyisocyanate | 9016-87-9 | | | 0.05 | | 0.05 | Germany (DFG) |
| Polymethylene polyphenyl polyisocyanate | 9016-87-9 | | | 0.05 | | 0.05 | Germany (AGS) |
| Polymethylene polyphenyl polyisocyanate | 9016-87-9 | | | 0.05 | | 0.05 | Germany (AGS) |
| Polymethylene polyphenyl polyisocyanate | 9016-87-9 | | | 0.05 | | 0.05 | Germany (DFG) |
| Dimethyl ether | 115-10-6 | | 1000 | 1900 | 8000 | 15200 | Germany (AGS) |
| Dimethyl ether | 115-10-6 | | 1000 | 1885 | 2000 | 3770 | Denmark |
| Dimethyl ether | 115-10-6 | | 1000 | 1920 | | | Ireland |
| Dimethyl ether | 115-10-6 | | 400 | 760 | 500 | 950 | Australia |

**Biological limit values**

Biological limit values: No data available

**Monitoring methods**

EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
GBZ/T 300.1~GBZ/T 300.160-2017; GBZ/T 300.161~GBZ/T 300.164-2018 Determination of toxic substances in workplace air (Series standard).

**Engineering controls**

Ensure adequate ventilation, especially in confined areas.
Ensure that eyewash stations and safety showers are close to the workstation location.
Use explosion-proof electrical/ventilating/lighting/equipment.
Set up emergency exit and necessary risk-elimination area.

**Personal protection equipment**

| | |
|---|---|
| Respiratory protection | If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges. |
| Hand protection | Wear protective gloves（such as butyl rubber）, passing the tests according to EN 374(EU), US F739 or AS/NZS 2161.1 standard. |
| Eye protection | Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US). |
| Skin and body protection | Wear fire/flame resistant/retardant clothing and antistatic boots.<br>Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.<br>Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc). |
| Hygienic measures | Ensure that eye flushing systems and safety showers are located close to the working place.<br>When using do not eat, drink or smoke.<br>Wash contaminated clothing before reuse.<br>Do not inhale gases / fumes / aerosols. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| Appearance | Foam |
| Odor | Slightly |
| Odor threshold | No information available |
| pH | Not applicable |
| Melting point/freezing point | No information available |
| Initial boiling point and boiling range (℃) | ≤35 |
| Flash point (℃) | ≥23℃, ≤60℃ (Closed cup) |
| Evaporation rate | No information available |
| Flammability | Flammable |
| Upper explosive limits[% (v/v)] | No information available |
| Lower explosive limits[% (v/v)] | No information available |
| Vapor pressure | No information available |
| Relative vapour density (Air＝1) | No information available |
| Relative density (Water=1) | 0.01~0.04 |
| Solubility (mg/L) | Insoluble |
| n-octanol/water partition coefficient | No information available |
| Dynamic viscosity | Not applicable |
| Particle characteristics | No information available |
| Explosive properties | Explosive |
| Oxidizing properties | Non oxidizing |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| Reactivity | Not classified as a reactivity hazard. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | In contact with halogens or interhalogens may cause an explosion. |
| Possibility of hazardous reactions | Incompatible materials, heat, flame and spark. |
| Incompatible materials | Halogen, halogen compounds, inorganic acid, sulfur, sulfides and sodium peroxide. |
| Hazardous decomposition products | No date available. |

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

| Component | CAS-No. | LD50(oral) | LD50(dermal) | LC50(inhalation,4h) |
|---|---|---|---|---|
| Polyethylene-polypropylene glycol | 9003-11-6 | 5700mg/kg(Rat) | No information available | 0.32mg/L(Rat) |
| Polymethylene polyphenyl polyisocyanate | 9016-87-9 | 49000mg/kg(Rat) | > 9400mg/kg (Rabbit) | 0.49mg/L(Rat) |

**Carcinogenicity**

| Component | CAS-No. | IARC | NTP |
|---|---|---|---|
| Dimethyl ether | 115-10-6 | Not Listed | Not Listed |
| Polymethylene polyphenyl polyisocyanate | 9016-87-9 | Category 3 | Not Listed |
| Polyethylene-polypropylene glycol | 9003-11-6 | Not Listed | Not Listed |

**Others**

| | |
|---|---|
| Skin corrosion/irritation | No further information available |
| Serious eye damage/irritation | No further information available |
| Skin sensitization | No further information available |
| Respiratory sensitization | No further information available |
| Reproductive toxicity | No further information available |
| STOT-single exposure | No further information available |
| STOT-repeated exposure | No further information available |
| Aspiration hazard | No further information available |
| Germ cell mutagenicity | No further information available |
| Reproductive toxicity(additional) | No further information available |

## 12. ECOLOGICAL INFORMATION

**Acute aquatic toxicity**

No further relevant information available.

**Chronic aquatic toxicity**

No further relevant information available。

**Persistence and degradability**

| | | | |
|---|---|---|---|
| Polymethylene polyphenyl polyisocyanate | 9016-87-9 | Low(Half-life = 1 days) | Low(Half-life = 0.24 days) |
| Polyethylene-polypropylene glycol | 9003-11-6 | Low(Half-life = 11.88 days) | High(Half-life = 381.96 days) |

**Bioaccumulative potential**

| Component | CAS-No. | Bioaccumulative potential | Comments |
|---|---|---|---|
| Polymethylene polyphenyl polyisocyanate | 9016-87-9 | Low | BCF=15 |
| Polyethylene-polypropylene glycol | 9003-11-6 | Low | BCF=35 |

**Mobility in soil**

| Component | CAS-No. | Mobility in soil | Soil Organic Carbon-Water Partitioning Coefficient (Koc) |
|---|---|---|---|
| Polymethylene polyphenyl polyisocyanate | 9016-87-9 | Low | 376200 |
| Polyethylene-polypropylene glycol | 9003-11-6 | High | 1.435 |

**Results of PBT and vPvB assessment**

| Component | CAS-No. | Results of PBT and vPvB assessment (according to (EC) No 1907/2006) |
|---|---|---|
| Dimethyl ether | 115-10-6 | not PBT/vPvB |
| Polymethylene polyphenyl polyisocyanate | 9016-87-9 | not PBT/vPvB |
| Polyethylene-polypropylene glycol | 9003-11-6 | not PBT/vPvB |

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

Waste from residues: Dispose of in accordance with local regulations

Contaminated packagin: Empty containers should be taken to an approved waste handling site for recycling or disposal.Do not pierce or burn, even after use.

If not otherwise specified: Dispose of as unused product.

Disposal recommenda: Refer to section waste chemicals and contaminated packaging

## 14. REGULATORY INFORMATION

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

## 15.OTHER INFORMATION

National Fire Prote ction Association (U.S.A.)

Healt: 0

Flammability: 1

Instability/Reactivity: 1

Special: NA