Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name
Trufast Roofing Adhesive - Part B (Tanks)

Synonyms
Urethane System Resin Component

Chemical Family
Resin

Product Use
Polyurethane Component, Industrial Chemicals

Restrictions on Use
Suitable for use in industrial sector: Polymers Industry, Chemical Industry

The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Manufacturer Information:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Phone: 973-245-6000
Emergency Phone #:
CHEMTREC: 800-424-9300
BASF HOTLINE: 800-832-4357

Supplier Information:
Altenloh, Brinck & Co.
02105 Williams County Road 12-C
Bryan, OH 43506, USA
Phone: 800-443-9602

Section 2 - HAZARDS IDENTIFICATION


Classification of the product

Press. Gas Compr. Gas Gases Under Pressure
STOT RE 2 (oral) Specific target organ toxicity-repeated exposure

Simple Asphyxiant Simple Asphyxiant (1) Simple Asphyxiant

GHS Label Elements
Symbol(s)
Safety Data Sheet
Material Name: Trufast Roofing Adhesive - Part B (Tanks)

Signal Word
Warning

Hazard Statement(s)
H280 Contains gas under pressure; may explode if heated. May displace oxygen and cause rapid suffocation.

H373 May cause damage to organs (Kidney) through prolonged or repeated exposure (oral).

Precautionary Statement(s)
Prevention
P260 Do not breathe dust/gas/mist/vapours.

Response
P314 Get medical advice/attention if you feel unwell.

Storage
P410 + P403 Protect from sunlight. Store in well-ventilated place.

Disposal
P501 Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified
No specific dangers known, if the regulations/notes for storage and handling are considered.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS


<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Weight %</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>811-97-2</td>
<td>&gt;= 10.0 - &lt; 15.0%</td>
<td>HFC-134A</td>
</tr>
<tr>
<td>111-46-6</td>
<td>&gt;= 1.0 - &lt; 3.0%</td>
<td>diethylene glycol</td>
</tr>
<tr>
<td>280-57-9</td>
<td>&gt;= 0.3 - &lt; 1.0%</td>
<td>triethylenediamine</td>
</tr>
<tr>
<td>25265-71-8</td>
<td>&gt;= 1.0 - &lt; 3.0%</td>
<td>dipropylene glycol</td>
</tr>
</tbody>
</table>

The product contains:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Weight %</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;= 0.0 - &lt; 1.0%</td>
<td>Nitrogen, used for cylinder pressuization only.</td>
</tr>
</tbody>
</table>
Section 4 - FIRST AID MEASURES

Description of first aid measures

General advice:
Remove contaminated clothing.

If Inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

If on skin:
Wash thoroughly with soap and water.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention. Do not induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important know symptoms and effects are described in the labeling (see section 2) and/or in section 11.

Hazards: No hazards anticipated.

Indication of any immediate medical attention and special treatment needed

Note to physician
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing media
Suitable extinguishing media: water spray, dry powder, carbon dioxide, foam

Special hazards arising from substance or mixture:
Hazards during fire-fighting: No particular hazards known.

Advice for fire-fighters
Protective equipment for fire-fighting: Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.
Section 6 - ACCIDENTAL RELEASE MEASURES

Further accidental release measures:
High risk of slipping due to leakage/spillage of product.

Personal Precautions, Protective Equipment and Emergency Procedures
Use personal protective clothing.

Environmental Precautions Do not empty into drains. Do not discharge into the subsoil/soil.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling
Ensure thorough ventilation of stores and work areas. Protect against moisture.

Protection against fire and explosion: No explosion proofing necessary.

Conditions for Safe Storage, Including any Incompatibilities
Segregate from foods and animal feeds. Segregate from acids. Segregate from oxidants.

Suitable materials for containers: Carbon steel (Iron), High density polyethylene (HDPE), Low density polyethylene (LDPE), Stainless steel 1.4301 (V2)

Further information on storage conditions: No special precautions necessary. Avoid extreme heat. Store protected against freezing.

Storage stability:
Storage temperature: 16 - 27 °C

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

No occupational exposure limits known.

Advice on system design:
Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:
Chemical resistant protective gloves.

Eye protection:
Wear face shield or tightly fitting goggles (chemical goggles) if splashing hazard exits.

Body protection:
Standard work clothes and shoes.
General safety and hygiene measures
Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice. Wear protective clothing as necessary to prevent contact. Avoid inhalation of vapours/mists. Wash soiled clothing immediately.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>amine-like</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No applicable information available.</td>
</tr>
<tr>
<td>Colour</td>
<td>clear</td>
</tr>
<tr>
<td>pH value</td>
<td>&gt;= 7.0</td>
</tr>
<tr>
<td>Freezing point</td>
<td>&gt; 0.00 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>&gt; 100.00 °C</td>
</tr>
<tr>
<td>Sublimation point</td>
<td>No applicable information available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>200.00 °F</td>
</tr>
<tr>
<td>Flammability</td>
<td>not flammable</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>For liquids not relevant for classification and labelling.</td>
</tr>
<tr>
<td>Autoignition</td>
<td>&gt; 250 °C</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>&lt; 0.1 hPa</td>
</tr>
<tr>
<td>Density</td>
<td>1.0010 - 1.0040 g/cm³</td>
</tr>
<tr>
<td>Relative density</td>
<td>No applicable information available.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>No applicable information available.</td>
</tr>
<tr>
<td>Partitioning coefficient n-octanol/water (log Pow)</td>
<td>Unspecified</td>
</tr>
<tr>
<td>Self-ignition temperature</td>
<td>Not self-igniting</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No decomposition if stored and handled as prescribed/indicated.</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>420.000 mPa.s</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No applicable information available.</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Slightly soluble.</td>
</tr>
<tr>
<td>Solubility (quantitative)</td>
<td>No applicable information available.</td>
</tr>
<tr>
<td>Solubility (qualitative)</td>
<td>No applicable information available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Value can be approximated from Henry's Law Constant or vapor pressure.</td>
</tr>
</tbody>
</table>

Other Information
If necessary, information on other physical and chemical parameters is indicated in this section.
Section 10 - STABILITY AND REACTIVITY

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:
No Corrosive effect on metal. expected.

Oxidizing properties:
Not an oxidizer.

Chemical Stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid
Temperature: < 0 degrees Celsius

Incompatible materials
acids, oxidizing agents, isocyanates

Hazardous decomposition products
Decomposition products
Hazardous decomposition products: carbon monoxide, carbon dioxide, nitrogen oxide, hydrogen cyanide

Thermal decomposition:
No decomposition if stored and handled as prescribed/indicated.

Section 11 - TOXICOLOGICAL INFORMATION

Primary routes of exposure
Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects
Acute toxicity
Assessment of acute toxicity: No known acute effects.
Safety Data Sheet
Content: Trufast Roofing Adhesive - Part B (Tanks)

Oral
No applicable information available.

Inhalation
No applicable information available.

Dermal
No applicable information available.

Assessment other acute effects
Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Origin of data: expert judgement

Irritation/Corrosion
Assessment of irritating effects: No irritation is expected under intended use and appropriate handling.

Sensitization
Assessment of sensitization: The chemical structure does not suggest a sensitizing effect. No applicable information available.

Aspiration Hazard
No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: Repeated exposure may affect certain organs.

Genetic toxicity
Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Carcinogenicity
Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Reproductive toxicity
Assessment of reproduction toxicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Teratogenicity
Assessment of teratogenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Other Information
The product has not been tested. The statement has been derived from the properties of the individual components.
Symptoms of Exposure
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Medical conditions aggravated by overexposure
Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product.

Section 12 - ECOLOGICAL INFORMATION

Toxicity
Aquatic toxicity
Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Persistence and degradability
Assessment biodegradation and elimination (H2O)
Poorly biodegradable.

Elimination information
Poorly biodegradable.

Bioaccumulative Potential
Assessment bioaccumulation potential
Does not significantly accumulate in organisms.

Mobility in soil
Assessment transport between environmental compartments
Adsorption to solid soil phase is not expected.

Additional information
Adsorbable organically-bound halogen (AOX):
This product contains no organically-bound halogen

Other ecotoxicological advice:
The product has not been tested. Do not discharge product into the environment without control.

Section 13 - DISPOSAL CONSIDERATIONS

Waste disposal of substance:
Incinerate in a licensed facility. Dispose of in a licensed facility. Do not discharge substance/product into sewer system.
Container disposal:
CYLINDERS:
Return to the manufacturer with residual pressure. If cylinder is damaged, please contact supplier. Empty cylinders (all sizes) must be depressurized before they are returned to supplier. Depressurization will not relieve all pressure. Always seal cylinder valves for return.

Section 14 - TRANSPORT INFORMATION

Containers Greater Than 100 cu. Cm. (1 liter)
Ground - UN3500 chemical Under Pressure n.o.s. (Fluorinated hydrocarbon, nitrogen)
2.2 (Non-Flammable Gas Label)

Air - UN3500 chemical Under Pressure n.o.s. (Fluorinated hydrocarbon, nitrogen)
2.2 (Non-Flammable Gas Label)

Water - UN3500 chemical Under Pressure n.o.s. (Fluorinated hydrocarbon, nitrogen)
2.2 (Non-Flammable Gas Label)

Section 15 - REGULATORY INFORMATION

Federal Regulations

Registration status:
Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Acute; Chronic, Sudden release of pressure

State regulations

<table>
<thead>
<tr>
<th>State RTK</th>
<th>CAS Number</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>111-46-6</td>
<td>diethylene glycol</td>
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<tr>
<td></td>
<td>25265-71-8</td>
<td>dipropylene glycol</td>
</tr>
</tbody>
</table>

CA Prop. 65:
WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NFPA Hazard codes:
Health: 1 Fire: 1 Reactivity: 1 Special:

HMIS III rating:
Health: 1 Flammability: 1 Physical hazard: 1

Section 16 - OTHER INFORMATION

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2016/05/01
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END OF DATA SHEET