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

1.1. Product identifier
Trade name: Polyol (component B) Foam Pack

1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended uses: Industrial polyurethane foam: Insulation for district heating joints
2 component kit. To be mixed together with isocyanate (Component A)

1.3. Details of the supplier of the safety data sheet
Supplier: LOGSTOR A/S
Danmarksvej 11
9670 Logstor
Denmark
Tel: +45 99 66 10 00
Fax: +45 99 66 11 80
Email: tit@logstor.com

1.4. Emergency telephone number
0870 600 6266 (UK only) Only available to health professionals.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
CLP-classification (Regulation (EC) No 1272/2008):
Flam. Liq. 2;H225

Please see section 16 for the full text of H-phrases.

Most serious harmful effects: Highly flammable liquid and vapour.
May cause slight irritation to the skin and eyes.

2.2. Label elements

Signal word: Danger
H-phrases: Highly flammable liquid and vapour.(H225)
P-phrases: Keep away from heat/sparks/open flames/hot surfaces. — No smoking.(P210)
Ground/bond container and receiving equipment.(P240)
Wear protective gloves/eye protection/face protection.(P280-høa)
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.(P303/361/353)
Store in a well-ventilated place. Keep cool.(P403/235)

2.3. Other hazards
When mixing two components, consult the safety data sheets for both components. The mixture does not meet the criteria for PBT or vPvB.

SECTION 3: Composition/information on ingredients
3.2. Mixtures

<table>
<thead>
<tr>
<th>Registration number</th>
<th>CAS/EC Number</th>
<th>Substance</th>
<th>CLP-classification (Regulation (EC) No 1272/2008) w/w%</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>287-92-3</td>
<td>Cyclopentane</td>
<td>Flam. Liq. 2; H225 Aquatic Chronic 3; H412</td>
<td>4-5 .</td>
</tr>
<tr>
<td>01-211953303</td>
<td>98-94-2</td>
<td>Cyclohexyldimethylamine</td>
<td>Flam. Liq. 3; H226 Acute tox. 3; H301/H311/H331</td>
<td>0,1-1 .</td>
</tr>
</tbody>
</table>

Please see section 16 for the full text of H-phrases.

SECTION 4: First aid measures
4.1. Description of first aid measures
Inhalation: Seek fresh air. Seek medical advice in case of persistent discomfort.
Ingestion: Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Seek medical advice in case of persistent discomfort.
Skin: Immediately remove contaminated clothing, watch and jewellery. Wash skin with soap and water. Seek medical advice in case of persistent discomfort.
Eyes: Flush with water (preferably using eye wash equipment) until irritation subsides. Seek medical advice if symptoms persist.
Burns: Flush with water until pain ceases. Remove clothing that is not stuck to the skin – seek medical advice/transport to hospital. If possible, continue flushing until medical attention is obtained.
Other information: When obtaining medical advice, show the safety data sheet or label.

4.2. Most important symptoms and effects, both acute and delayed
May cause slight irritation to the skin and eyes.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptoms. No special immediate treatment required.

SECTION 5: Firefighting measures
5.1. Extinguishing media
Suitable extinguishing media
Extinguish with powder, foam, carbon dioxide or water mist. Use water or water mist to cool non-ignited stock.

Unsuitable extinguishing media
Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture
Product decomposes in fire conditions and toxic gases such as CO, CO2, NOx may be released.

5.3. Advice for firefighters
Move containers from danger area if it can be done without risk. Avoid inhalation of vapour and flue gases – seek fresh air. Wear Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
For non-emergency personnel:
Stop leak if this can be done without risk. Wear safety goggles if there is a risk of eye splash. Wear gloves. Take precautionary measures against static discharges. Use spark-free tools and explosion proof equipment.
For emergency responders: In addition to the above: Normal protective clothing equivalent to EN 469 is recommended.

6.2. Environmental precautions

Prevent spillage from entering drains and/or surface water.

6.3. Methods and material for containment and cleaning up

Contain and absorb spill with sand or other absorbent, non-combustible material and transfer to suitable waste containers. Wipe up minor spills with a cloth. Rinse with water.

6.4. Reference to other sections

See section 8 for type of protective equipment. See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

The product should be used under well-ventilated conditions and preferably under process ventilation. Running water and eye wash equipment should be available. Take precautionary measures against static discharges. Use spark-free tools and explosion proof equipment.

7.2. Conditions for safe storage, including any incompatibilities

The product should be stored safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc. Store cold, but frost-free. Store in a well-ventilated area.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters


Contains no substances subject to reporting requirements.

8.2. Exposure controls

Appropriate engineering controls: Wear the personal protective equipment specified below.

Personal protective equipment, eye/face protection: Wear safety goggles if there is a risk of eye splash. Eye protection must conform to EN 166.

Personal protective equipment, skin protection: Wear protective gloves made of nitrile rubber. Breakthrough time has not been determined for the product. Change gloves often. Gloves must conform to EN 374.

Personal protective equipment, respiratory protection: In case of risk of formation of spray mist, wear respiratory protective equipment with P2 filter. Respiratory protection must conform to one of the following standards: EN 136/140/145.

Environmental exposure controls: Ensure compliance with local regulations for emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Yellowish

Odour: Characteristic

Odour threshold: No data

pH (solution for use): Approx. 7-9

pH (concentrate): No data

Melting point/freezing point: N/A

Initial boiling point and boiling range: >140°C (1013 hPa)

Flash point: 18°C

Evaporation rate: No data

Flammability (solid, gas): Highly flammable liquid

Upper/lower flammability limits: No data

Upper/lower explosive limits: 1.4/8.0 vol % (cyclopentane)

Vapour pressure: <350 mbar (20°C)

Vapour density: No data
Relative density: 1.05 g/cm³ (20°C)
Solubility: Poorly soluble in water Miscible with water
Partition coefficient n-octanol/water: No data
Auto-ignition temperature: No data
Decomposition temperature: No data
Viscosity: 1400 mPa*sek (25°C)
Explosive properties: No data
Oxidising properties: No data

9.2. Other information
Solidifying Point: < 0°C
Hardening time: 5 min (20°C)

SECTION 10: Stability and reactivity

10.1. Reactivity
Reacts with strong oxidizing agents, strong acids and isocyanate.

10.2. Chemical stability
The product is stable when used in accordance with the supplier’s directions.

10.3. Possibility of hazardous reactions
Reacts with isocyanate under heavy heat and pressure generation.

10.4. Conditions to avoid
Avoid temperatures <0°C. Avoid heating and contact with ignition sources.

10.5. Incompatible materials
Avoid contact with the following: strong oxidizing agents, strong acids and isocyanate (not intended).

10.6. Hazardous decomposition products
None, if stored at the recommended storage conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity - oral: The product does not have to be classified. Test data are not available.
Acute toxicity - dermal: The product does not have to be classified. Test data are not available.
Acute toxicity - inhalation: The product does not have to be classified. Test data are not available.
Skin corrosion/irritation: May irritate the skin – may cause reddening. The product does not have to be classified. Test data are not available.
Serious eye damage/eye irritation: May cause eye irritation. The product does not have to be classified. Test data are not available.
Respiratory sensitisation or skin sensitisation: The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.
25322-69-4: Guinea pig: Non-sensitising.
Germ cell mutagenicity: The product does not have to be classified. Test data are not available.
Carcinogenic properties: The product does not have to be classified. Test data are not available.
Reproductive toxicity: The product does not have to be classified. Test data are not available.
Single STOT exposure: The product does not have to be classified. Test data are not available.
Repeated STOT exposure: The product does not have to be classified. Test data are not available. Prolonged or repeated inhalation of vapours may cause damage to the central nervous system.
Aspiration hazard: The product does not have to be classified. Test data are not available.

Other toxicological effects: None known.

SECTION 12: Ecological information

12.1. Toxicity
The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Acute toxicity: 287-92-3: Crustacea: EC50 (48h) = 10,15 mg/l.

12.2. Persistence and degradability
The product does not have to be classified. Slow degradation. Poor water solubility.
287-92-3: Not readily biodegradable.
98-94-2: Not readily biodegradable.

12.3. Bioaccumulative potential
No bioaccumulation expected.
287-92-3: Partition coefficient n-octanol/water: 2,8
98-94-2: Partition coefficient n-octanol/water: 2,08

12.4. Mobility in soil
Test data are not available.

12.5. Results of PBT and vPvB assessment
The mixture does not meet the criteria for PBT or vPvB.

12.6. Other adverse effects
None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Avoid discharge to drain or surface water. Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.

EWC code: Depends on line of business and use, for instance 07 02 08 other still bottoms and reaction residues
Absorbent/cloth contaminated with the product:
EWC code: 15 02 02 absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances.
Empty, cleansed packaging should be disposed of for recycling.

SECTION 14: Transport information

ADR/RID
14.1. UN number 1866
14.2. UN proper shipping name RESIN SOLUTION
14.3. Transport hazard class(es) 3
14.4. Packing group II
Hazard identification number 33
Tunnel restriction code: D/E
14.5. Environmental hazards The product should not be labelled as an environmental hazard (symbol: fish and tree).
Supplemental information: -
ADN
14.1. UN number 1866
14.2. UN proper shipping name RESIN SOLUTION vapour pressure at 50°C not more than 110 kPa (640D)
14.3. Transport hazard class(es) 3
14.4. Packing group II
14.5. Environmental hazards The product should not be labelled as an environmental hazard (symbol: fish and tree).
Transport in tank vessels: Not applicable.
Supplemental information: -

IMDG
14.1. UN number 1866
14.2. UN proper shipping name RESIN SOLUTION flammable
14.3. Transport hazard class(es) 3
14.4. Packing group II
14.5. Environmental hazards The product is not a Marine Pollutant (MP).
IMDG Code segregation group: -
Supplemental information: -

ICAO/IATA
14.1. UN number 1866
14.2. UN proper shipping name RESIN SOLUTION flammable
14.3. Transport hazard class(es) 3
14.4. Packing group II
Supplemental information: -

14.6. Special precautions for user
None.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Special provisions: Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product. Directive 2012/18/EU (Seveso), P5c FLAMMABLE LIQUIDS: Column 2: 5000 t, Column 3: 50000 t.

15.2. Chemical safety assessment
Chemical safety assessment has not been performed.

SECTION 16: Other information
Changes have been made in the following sections: 2,3,16
Abbreviation explanations: PBT: Persistent, Bioaccumulative and Toxic
vPvB: Very Persistent and Very Bioaccumulative
Classification method: Calculation based on the hazards of the known components. Test data
H-phrases: H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.

Training: A thorough knowledge of this safety data sheet should be a prerequisite condition.

Other information: This safety data sheet has been prepared for and applies to this product only. It is based on our current knowledge and the information that the supplier was able to provide about the product at the time of preparation. The safety data sheet complies with applicable law on preparation of safety data sheets in accordance with 1907/2006/EC (REACH) as subsequently changed.