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

1.1 Product identifier
- Trade name: TREMCO PU540
- MSDS code: A-T-PU540

1.2 Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the preparation
  - Sealant
  - Polyurethane sealing

1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
  Tremco illbruck Productie B.V.
  Vlietskade 1032, 4241 WC Arkel, The Netherlands
  T: +31 (0) 183568000, F: +31 (0) 183568100
  msds@tremco-illbruck.com

- Further information obtainable from:
  Tremco illbruck Ltd
  Coupland Road, Hindley Green, Wigan, WN2 4HT, United Kingdom
  T: +44 (0) 1942251400, F: +44 (0) 1942251410
  www.tremco-illbruck.co.uk, uk.info@tremco-illbruck.com

1.4 Emergency telephone number:
- During office hours tel.: +44 (0) 1942251400. At all other times please contact your national poisoning centre.

2 Hazards identification

2.1 Classification of the substance or mixture
- Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- Information concerning particular hazards for human and environment:
  The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- Classification system:
  The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

2.2 Label elements
- Labelling according to EU guidelines:
  Observe the general safety regulations when handling chemicals.
  The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

- Special labelling of certain preparations:
  Contains isocyanates. See information supplied by the manufacturer
  Safety data sheet available for professional user on request.

2.3 Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

(Contd. on page 2)
3 Composition/information on ingredients

· 3.2 Chemical characterization: Mixtures
· Description: Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS</th>
<th>EINECS</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>1330-20-7</td>
<td>215-535-7</td>
<td>5- &lt;10%</td>
</tr>
<tr>
<td>Xn R20/21; Xi R38; Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td>265-149-8</td>
<td>1- &lt;5%</td>
</tr>
<tr>
<td>Xn R65</td>
<td>R86</td>
<td>Flam. Liq. 3, H226; Asp. Tox. 1, H304</td>
<td></td>
</tr>
<tr>
<td>calcium oxide</td>
<td>1305-78-8</td>
<td>215-138-9</td>
<td>1- &lt;5%</td>
</tr>
<tr>
<td>Xi R38-41</td>
<td></td>
<td>Eye Dam. 1, H318; Skin Irrit. 2, H315</td>
<td></td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>202-849-4</td>
<td>1- &lt;5%</td>
</tr>
<tr>
<td>Xn R20; F R11</td>
<td></td>
<td>Flam. Liq. 2, H225; Acute Tox. 4, H332</td>
<td></td>
</tr>
</tbody>
</table>

· Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· 4.1 Description of first aid measures
· General information: Immediately remove any clothing soiled by the product.
· After inhalation:
  Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
  In case of unconsciousness place patient stably in side position for transportation.
· After skin contact:
  Immediately wash with water and soap and rinse thoroughly.
  If skin irritation continues, consult a doctor.
· After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
· After swallowing: Do not induce vomiting; call for medical help immediately.
· 4.2 Most important symptoms and effects, both acute and delayed
  Headache
  Dizziness
  Nausea
  Disorientation
  Allergic reactions
· Information for doctor: No further relevant information available.
· Hazards: No further relevant information available.
· 4.3 Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

(Contd. on page 3)
5 Firefighting measures

· 5.1 Extinguishing media
· Suitable extinguishing agents:
  Carbon dioxide
  Foam
  Fire-extinguishing powder
  Use fire extinguishing methods suitable to surrounding conditions.
· For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture
In case of fire, the following can be released:
  Carbon monoxide (CO)
  Nitrogen oxides (NOx)
Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:
  Hydrogen cyanide (HCN)

5.3 Advice for firefighters
· Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures
  Wear protective clothing.
  Ensure adequate ventilation
  Keep away from ignition sources.
· 6.2 Environmental precautions: Do not allow to enter sewers/surface or ground water.
· 6.3 Methods and material for containment and cleaning up:
  Pick up mechanically.
  Send for recovery or disposal in suitable receptacles.
  Do not seal receptacles gas-tight.
· 6.4 Reference to other sections
  No dangerous substances are released.
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

· 7.1 Precautions for safe handling
  Ensure good ventilation/exhaustion at the workplace.
  Avoid contact with the eyes and skin.
  Open and handle receptacle with care.
· Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.
· 7.2 Conditions for safe storage, including any incompatibilities
· Storage:
  Requirements to be met by storerooms and receptacles: Store in a cool location.
  Information about storage in one common storage facility: Protect from heat and direct sunlight.
· Further information about storage conditions:
  Store in cool, dry conditions in well sealed receptacles.
  Protect from humidity and water.
8 Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

| Chemical | WEL       | Short-term value | Long-term value | Sk; BMGV
|----------|-----------|------------------|----------------|--------
| 1330-20-7 xylene | Short-term value: 441 mg/m³, 100 ppm | Long-term value: 220 mg/m³, 50 ppm | Sk; BMGV |
| 64742-47-8 Distillates (petroleum), hydrotreated light | Short-term value: 1200 mg/m³, 165 ppm | Long-term value: 200 mg/m³ |
| 100-41-4 ethylbenzene | Short-term value: 552 mg/m³, 125 ppm | Long-term value: 441 mg/m³, 100 ppm | Sk |

Additional information:
The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Avoid close or long term contact with the skin.
Wash hands before breaks and at the end of work.
Do not eat, drink, smoke or sniff while working.

Respiratory protection:
This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.
Short term filter device:
Filter AB

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves
PVA gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
**Trade name: TREMCO PU540**

(Contd. of page 4)

- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses  
- **Body protection:** Protective work clothing

### 9 Physical and chemical properties

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

**General Information**

- **Appearance:**
  - Form: Pasty
  - Colour: According to product specification
  - Odour: Light

- **Change in condition**
  - Boiling point/Boiling range: 137°C

- **Flash point:** > 40°C

- **Flammability (solid, gaseous):** The product is not subject to classification because its speed of combustion is lower than the limit of the regulation

- **Ignition temperature:** >200°C

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- **Explosion limits:**
  - Lower: 0.6 Vol %
  - Upper: 8 Vol %

- **Density at 20°C:** 1.17 g/cm³

- **Solubility in / Miscibility with water:** Insoluble.

**9.2 Other information**  
No further relevant information available.

### 10 Stability and reactivity

**10.1 Reactivity** Stable

**10.2 Chemical stability**

- **Thermal decomposition / conditions to be avoided:**
  No decomposition if used according to specifications.

**10.3 Possibility of hazardous reactions**

Reacts with alcohols, amines, aqueous acids and alkalis.

Reacts with water.

Danger of bursting.

**10.4 Conditions to avoid** Water / moisture.

**10.5 Incompatible materials:** No further relevant information available.

**10.6 Hazardous decomposition products:**

Possible in traces.

(Contd. on page 6)
Isocyanate

## 11 Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity:

- **LD/LC50 values relevant for classification:**

<table>
<thead>
<tr>
<th>1330-20-7 xylene</th>
<th>101-68-8 4,4'-methylenediphenyl diisocyanate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>4300 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>2000 mg/kg (rbd)</td>
</tr>
<tr>
<td>EC50/72 h</td>
<td>10 mg/L (skeletonema costatum)</td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
  - on the skin: Slight irritation possible
  - on the eye: Slight irritation possible

- **Sensitization:**
  Sensitizing effect by skin contact is possible by prolonged exposure.
  Sensitizing effect through inhalation is possible by prolonged exposure.

- **Additional toxicological information:**
  The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
  When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

### 12 Ecological information

#### 12.1 Toxicity

- **Aquatic toxicity:**
<table>
<thead>
<tr>
<th>1330-20-7 xylene</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50/48 h</td>
</tr>
<tr>
<td>LC50/96 h</td>
</tr>
</tbody>
</table>

- **Persistence and degradability**
  No further relevant information available.

- **Bioaccumulative potential**
  No further relevant information available.

- **Mobility in soil**
  No further relevant information available.

- **Additional ecological information:**
  - General notes: Do not allow product to reach ground water, water course or sewage system.
  - **Results of PBT and vPvB assessment**
    - PBT: Not applicable.
    - vPvB: Not applicable.

- **12.6 Other adverse effects**
  No further relevant information available.
13 Disposal considerations

- **13.1 Waste treatment methods**
  - **Recommendation**: Disposal must be made according to official regulations.
  - **European waste catalogue**
    - 08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances
  - **Uncleaned packaging**:
    - **Recommendation**: Dispose of packaging according to regulations on the disposal of packagings. Non contaminated packagings may be recycled.

14 Transport information

- **14.1 UN-Number**
  - ADR, ADN, IMDG, IATA: Void
- **14.2 UN proper shipping name**
  - ADR, ADN, IMDG, IATA: Void
- **14.3 Transport hazard class(es)**
  - ADR, ADN, IMDG, IATA: Class Void
- **14.4 Packing group**
  - ADR, IMDG, IATA: Void
- **14.5 Environmental hazards**:
  - **Marine pollutant**: No
- **14.6 Special precautions for user**: Not applicable.
- **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**: Not applicable.

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - Directive 1999/45/EC.
  - "CHIP" SI 2009 No.716.
- **National regulations**:
  - Additional classification according to Decree on Hazardous Materials, Annex II:
    - No further relevant information available.
- **Information about limitation of use**: No further relevant information available.
- **Other regulations, limitations and prohibitive regulations**
  - Substances of very high concern (SVHC) according to REACH, Article 57: Not applicable.

(Contd. on page 8)

(Contd. of page 6)
**Safety data sheet**

according to 1907/2006/EC, Article 31

Trade name: TREMCO PU540

(Contd. of page 7)

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

<table>
<thead>
<tr>
<th>Relevant phrases</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapour.</td>
</tr>
<tr>
<td>H226</td>
<td>Flammable liquid and vapour.</td>
</tr>
<tr>
<td>H304</td>
<td>May be fatal if swallowed and enters airways.</td>
</tr>
<tr>
<td>H312</td>
<td>Harmful in contact with skin.</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled.</td>
</tr>
<tr>
<td>R10</td>
<td>Flammable.</td>
</tr>
<tr>
<td>R11</td>
<td>Highly flammable.</td>
</tr>
<tr>
<td>R20</td>
<td>Harmful by inhalation.</td>
</tr>
<tr>
<td>R20/21</td>
<td>Harmful by inhalation and in contact with skin.</td>
</tr>
<tr>
<td>R38</td>
<td>Irritating to skin.</td>
</tr>
<tr>
<td>R41</td>
<td>Risk of serious damage to eyes.</td>
</tr>
<tr>
<td>R65</td>
<td>Harmful: may cause lung damage if swallowed.</td>
</tr>
<tr>
<td>R66</td>
<td>Repeated exposure may cause skin dryness or cracking.</td>
</tr>
</tbody>
</table>

**Previous Revision Date:** 21-04-2011