

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 25.04.2012

Version number 1

Revision: 24.11.2011

**1 Identification of the substance/mixture and of the company/undertaking**· **1.1 Product identifier**· Trade name: **illbruck PU108**· **MSDS code:** A-I-PU108· **1.2 Relevant identified uses of the substance or mixture and uses advised against**· **Application of the substance / the preparation** Sealant· **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**

Xn; Harmful

R20-40-48/20: Harmful by inhalation. Limited evidence of a carcinogenic effect. Harmful: danger of serious damage to health by prolonged exposure through inhalation.



Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.



Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.



F+; Extremely flammable

R12: Extremely flammable.

R53-64: May cause long-term adverse effects in the aquatic environment. May cause harm to breastfed babies.

· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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· **2.2 Label elements**

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**

Xn Harmful

F+ Extremely flammable

· **Hazard-determining components of labelling:**

diphenylmethanediisocyanate, isomeres and homologues

· **Risk phrases:**

12 Extremely flammable.

20 Harmful by inhalation.

36/37/38 Irritating to eyes, respiratory system and skin.

40 Limited evidence of a carcinogenic effect.

42/43 May cause sensitisation by inhalation and skin contact.

48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

53 May cause long-term adverse effects in the aquatic environment.

64 May cause harm to breastfed babies.

· **Safety phrases:**

2 Keep out of the reach of children.

16 Keep away from sources of ignition - No smoking.

23 Do not breathe vapour/spray.

36/37 Wear suitable protective clothing and gloves.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

51 Use only in well-ventilated areas.

57 Use appropriate container to avoid environmental contamination.

· **Special labelling of certain preparations:**

Contains isocyanates. See information supplied by the manufacturer

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Buildup of explosive mixtures possible without sufficient ventilation.

· **Classification in accordance with Directive 75/324/EEC: Extremely flammable**

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

**3 Composition/information on ingredients**

· **3.2 Chemical characterization: Mixtures**




















· **Description:** Active substance with propellant

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**· Dangerous components:**

CAS: 9016-87-9 EINECS: 202-966-0	diphenylmethanediisocyanate, isomeres and homologues  Xn R20-40-48/20;  Xn R42/43;  Xi R36/37/38 Carc. Cat. 3 <hr/>  Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373;  Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	50- <75%
CAS: 85535-85-9 EINECS: 287-477-0	alkanes, C14-17, chloro  N R50/53 R64-66 <hr/>  Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Lact., H362	5- <10%
CAS: 115-10-6 EINECS: 204-065-8	dimethyl ether  F+ R12 <hr/>  Flam. Gas 1, H220;  Press. Gas, H280	5- <10%
CAS: 75-28-5 EINECS: 200-857-2	isobutane  F+ R12 <hr/>  Flam. Gas 1, H220;  Press. Gas, H280	5- <10%
CAS: 74-98-6 EINECS: 200-827-9	propane  F+ R12 <hr/>  Flam. Gas 1, H220;  Press. Gas, H280	1- <5%
CAS: 1244733-77-4 EC number: 911-815-4	tris(2-chloro-1-methylethyl)phosphate  Xn R22 <hr/>  Acute Tox. 3, H331;  Acute Tox. 4, H302	1- <5%

**· Additional information:**

While curing the following substances are formed and released by a reaction with atmospheric humidity:

Carbon dioxide

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:** Take affected persons out of danger area and lay down.

**· After inhalation:**

Supply fresh air and to be sure call for a doctor.

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 symptoms persist consult doctor.

**· After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, 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**

No further relevant information available.

· **Information for doctor:** No further relevant information available.

· **Hazards** No further relevant information available.

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- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
Carbon monoxide (CO)  
Carbon dioxide  
Nitrogen oxides (NO<sub>x</sub>)  
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**  
Not required.  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.  
Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections**  
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.  
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**  
Do not spray onto a naked flame or any incandescent material.  
Protect against electrostatic charges.  
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Store away from water.
- **Further information about storage conditions:**  
Keep container tightly sealed.

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- Do not seal receptacle gas tight.
- Store in cool, dry conditions in well sealed receptacles.
- Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

### 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

WEL	Short-term value: 0.07 mg/m <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> Sen; as -NCO
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### 115-10-6 dimethyl ether

WEL	Short-term value: 958 mg/m <sup>3</sup> , 500 ppm Long-term value: 766 mg/m <sup>3</sup> , 400 ppm
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- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - Keep away from foodstuffs, beverages and feed.
  - Immediately remove all soiled and contaminated clothing
  - Wash hands before breaks and at the end of work.
  - Avoid contact with the eyes and skin.
  - Do not inhale gases / fumes / aerosols.
- **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.
- **Protection of hands:**



Protective gloves

- **Material of gloves**
  - PE gloves
  - Recommended thickness of the material:  $\geq 0.02$  mm
- **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.
- **For the permanent contact gloves made of the following materials are suitable:**
  - Nitrile rubber, NBR
  - Natural rubber, NR
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
  - PE gloves

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· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

**Form:** Aerosol  
**Colour:** According to product specification

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

**Melting point/Melting range:** Not applicable, as aerosol.  
**Boiling point/Boiling range:** -44°C

· **Flash point:** -97°C

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:**

**Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

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

· **Explosion limits:**

**Lower:** 3.0 Vol %  
**Upper:** 18.6 Vol %

· **Vapour pressure at 20°C:** 5200 hPa

· **Density at 20°C:** 0.99 g/cm<sup>3</sup>  
· **Relative density:** Not determined.  
· **Vapour density:** Not determined.  
· **Evaporation rate:** Not applicable.

· **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

· **Segregation coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

**Dynamic:** Not determined.  
**Kinematic:** Not determined.

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- **Solvent content:**
- VOC (EU)** 149.7 g/l
- VOC (EC)** 15.10 %
- **9.2 Other information** No further relevant information available.

## 10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

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

### 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

Oral	LD50	> 10000 mg/kg (rat)
Dermal	LD50	> 10000 mg/kg (rabbit)
Inhalative	LC50/4 h	ca. 0.493 mg/L (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:**  
Sensitization possible through inhalation.  
Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Irritant

## 12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:** The product is difficultly biodegradable.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

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- **Additional ecological information:**
- **General notes:**  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.
- **12.5 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**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· <b>European waste catalogue</b>	
16 05 05	gases in pressure containers other than those mentioned in 16 05 04
15 01 04	metallic packaging

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Number</b></li> <li>· <b>ADR, IMDG, IATA</b></li> <li>· <b>ADN</b></li> </ul>   | <p>UN1950<br/>Void</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR</b></li> <li>· <b>ADN</b></li> <li>· <b>IMDG</b></li> <li>· <b>IATA</b></li> </ul> | <p>1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS<br/>Void<br/>AEROSOLS (alkanes, C14-17, chloro), MARINE POLLUTANT<br/>AEROSOLS, flammable</p>  |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transport hazard class(es)</b></li> <li>· <b>ADR</b></li> </ul>  | <div style="display: flex; align-items: center; gap: 10px;">   </div> <p>· <b>Class</b> 2 5F Gases.<br/>· <b>Label</b> 2.1</p> |

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· <b>ADN/R Class:</b>	Void
· <b>IMDG</b>	
	
· <b>Class</b>	2.1
· <b>Label</b>	2.1
· <b>IATA</b>	
	
· <b>Class</b>	2.1
· <b>Label</b>	2.1
· <b>14.4 Packing group</b>	
· <b>ADR, IMDG, IATA</b>	Void
· <b>14.5 Environmental hazards:</b>	Product contains environmentally hazardous substances: alkanes, C14-17, chloro
· <b>Marine pollutant:</b>	Yes
· <b>Special marking (ADR):</b>	Symbol (fish and tree) Symbol (fish and tree)
· <b>14.6 Special precautions for user</b>	Warning: Gases.
· <b>Danger code (Kemler):</b>	-
· <b>EMS Number:</b>	F-D,S-U
· <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Tunnel restriction code</b>	D

**15 Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Information about limitation of use:**  
Employment restrictions concerning juveniles must be observed.  
Employment restrictions concerning pregnant and lactating women must be observed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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## 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.

### · Relevant phrases

- |           |  |
|-----------|--|
| H220      | Extremely flammable gas.   |
| H280      | Contains gas under pressure; may explode if heated.  |
| H302      | Harmful if swallowed.  |
| H315      | Causes skin irritation.  |
| H317      | May cause an allergic skin reaction.   |
| H319      | Causes serious eye irritation.   |
| H331      | Toxic if inhaled.  |
| H332      | Harmful if inhaled.  |
| H334      | May cause allergy or asthma symptoms or breathing difficulties if inhaled.                       |
| H335      | May cause respiratory irritation.  |
| H351      | Suspected of causing cancer.   |
| H362      | May cause harm to breast-fed children.   |
| H373      | May cause damage to organs through prolonged or repeated exposure.                               |
| H400      | Very toxic to aquatic life.  |
| H410      | Very toxic to aquatic life with long lasting effects.  |
| .....     |  |
| R12       | Extremely flammable.   |
| R20       | Harmful by inhalation.   |
| R22       | Harmful if swallowed.  |
| R36/37/38 | Irritating to eyes, respiratory system and skin.   |
| R40       | Limited evidence of a carcinogenic effect.   |
| R42/43    | May cause sensitisation by inhalation and skin contact.  |
| R48/20    | Harmful: danger of serious damage to health by prolonged exposure through inhalation.            |
| R50/53    | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R64       | May cause harm to breastfed babies.  |
| R66       | Repeated exposure may cause skin dryness or cracking.  |