

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

Printing date 09.07.2015

Version number 4

Revision: 09.07.2015

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

- **1.1 Product identifier**

- Trade name: illbruck PU540

- **MSDS code:** A-I-PU540(UK)

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

- **Application of the substance / the mixture**

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

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

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.

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**

- **Classification according to Regulation (EC) No 1272/2008**

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**



GHS08

- **Signal word** Danger

- **Contains:**

diphenylmethanediisocyanate, isomers and homologues

- **Hazard statements**

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H412 Harmful to aquatic life with long lasting effects.

(Contd. on page 2)

GB

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 09.07.2015

Version number 4

Revision: 09.07.2015

Trade name: illbruck PU540

(Contd. of page 1)

- **Precautionary statements**

P285 In case of inadequate ventilation wear respiratory protection.

P273 Avoid release to the environment.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

- **Supplemental information:**

EUH204 Contains isocyanates. May produce an allergic reaction.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:** Mixture of substances listed below with non-hazardous additions.

- **Dangerous components:**

CAS: 1330-20-7 EINECS: 215-535-7	xylene Flam. Liq. 2, H225; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	5- <10%
CAS: 9016-87-9 EINECS: 202-966-0	diphenylmethanediisocyanate, isomers and homologues 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	0.1- <1%
	mixture of Tris(nonylphenol) phosphite and Phenol, 4-nonyl, branched Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317	0.1- <1%
CAS: 41556-26-7 EINECS: 255-437-1 Reg.nr.: 01-2119491304-40-xxxx	bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317	0.1- <1%
CAS: 82919-37-7 EINECS: 280-060-4	methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317	0.1- <1%

- **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.

### SECTION 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.

(Contd. on page 3)

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

Printing date 09.07.2015

Version number 4

Revision: 09.07.2015

**Trade name: illbruck PU540**

(Contd. of page 2)

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

Irritating to respiratory system.

**· 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.

### SECTION 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 (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.

Wear fully protective suit.

**· Additional information**

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

### SECTION 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.

(Contd. on page 4)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 09.07.2015

Version number 4

Revision: 09.07.2015

**Trade name: illbruck PU540**

(Contd. of page 3)

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.

**SECTION 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.

**· 7.3 Specific end use(s)** No further relevant information available.**SECTION 8: Exposure controls/personal protection****· 8.1 Control parameters****· Ingredients with limit values that require monitoring at the workplace:****1330-20-7 xylene**

WEL	Short-term value: 441 mg/m <sup>3</sup> , 100 ppm Long-term value: 220 mg/m <sup>3</sup> , 50 ppm Sk; BMGV
-----	--

**9016-87-9 diphenylmethanediisocyanate, isomers 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
-----	---

**· Ingredients with biological limit values:****1330-20-7 xylene**

BMGV	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid
------	--

**· Additional information:**

The lists valid during the making were used as basis.

EH40/2005 Workplace Exposure Limits (2nd edition, 2011)

(Contd. on page 5)

GB

## Safety data sheet

### according to 1907/2006/EC, Article 31


Printing date 09.07.2015

Version number 4

Revision: 09.07.2015

**Trade name: illbruck PU540**

(Contd. of page 4)

- **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:**  
Use only in well-ventilated areas.  
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.  
Only use chemical-protective gloves with CE-labelling of category III.
  - **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.
  - **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

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Pasty
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Light
- **Flash point:** > 200 °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

(Contd. on page 6)

GB

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 09.07.2015

Version number 4

Revision: 09.07.2015

Trade name: illbruck PU540

(Contd. of page 5)

· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	0.6 Vol %
<b>Upper:</b>	8 Vol %
· <b>Density at 20 °C:</b>	1.33 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with water:</b>	Insoluble.
· <b>Viscosity:</b>	
<b>Dynamic at 20 °C:</b>	60000 - 120000 cps
· <b>Solvent content:</b>	
<b>VOC (EU)</b>	92 g/l
<b>VOC (EC)</b>	6.92 %
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 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.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
Possible in traces.  
Isocyanate

### SECTION 11: Toxicological information

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

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

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

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

- **Primary irritant effect:**
- **Skin corrosion/irritation** Slight irritation possible

(Contd. on page 7)

GB

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

Printing date 09.07.2015

Version number 4

Revision: 09.07.2015

Trade name: illbruck PU540

(Contd. of page 6)

- **Serious eye damage/irritation** Slight irritation possible.
- **Respiratory or skin sensitisation**  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- **Sensitisation** May cause sensitisation by inhalation and skin contact.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

#### · 12.1 Toxicity

##### · Aquatic toxicity:

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

EC50/24 h	> 1000 mg/L (daphnia magna)
LC0/96 h	> 1000 mg/L (brachydanio rerio)
NOEC/21 d	> 10 mg/L (daphnia magna)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**  
Harmful to aquatic organisms  
Do not allow product to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Disposal must be made according to official regulations.
- **Waste disposal key:** UK : H14

#### · 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.

(Contd. on page 8)

GB

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 09.07.2015

Version number 4

Revision: 09.07.2015

Trade name: illbruck PU540

(Contd. of page 7)

Non contaminated packagings may be recycled.

### SECTION 14: Transport information

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

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
"CLP" Regulation (EC) No 1272/2008 (OJ L 353, 31.12.2008, p.1).  
"CHIP" SI 2009 No.716.  
"REACH" Regulation (EC) No 1907/2006 (OJ L 396, 30.12.2006, p.1, with subsequent amendments).  
COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010  
COMMISSION REGULATION (EU) 2015/830 of 28 May 2015
- **National regulations:**
- **Information about limitation of use:**  
Employment restrictions concerning juveniles must be observed.  
Employment restrictions concerning pregnant and lactating women must be observed.
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57** Not applicable.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 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**  
H225 Highly flammable liquid and vapour.

(Contd. on page 9)

GB



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

Printing date 09.07.2015

Version number 4

Revision: 09.07.2015

**Trade name: illbruck PU540**

(Contd. of page 8)

H312 Harmful in contact with skin.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 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.  
 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.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 VOC: Volatile Organic Compounds (USA, EU)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 SVHC: Substances of Very High Concern  
 vPvB: very Persistent and very Bioaccumulative  
 Flam. Liq. 2: Flammable liquids, Hazard Category 2  
 Acute Tox. 4: Acute toxicity, Hazard Category 4  
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2  
 Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1  
 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1  
 Carc. 2: Carcinogenicity, Hazard Category 2  
 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3  
 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2  
 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1  
 Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1  
 Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

· **\* Data compared to the previous version altered.**