

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

Printing date 13.02.2013

Version number 1

Revision: 13.02.2013

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

- **1.1 Product identifier**
- **Trade name:** illbruck PU230
- **MSDS code:** A-I-PU230
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Glue/ Sizing agent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Tremco illbruck Coatings Ltd
Coupland Road, Hindley Green, WIGAN, WN2 4HT, United Kingdom
Tel: +44 (0) 1942251400, Fax: +44 (0) 1942251410
msds@tremco-illbruck.com
- **Further information obtainable from:**
Tremco illbruck B.V.
Vlietskade 1032, 4241 WC Arkel, The Netherlands
T: +31 (0)183568019, F: +31 (0) 183568010
www.tremco-illbruck.com, info-nl@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.
 - **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.
 - **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:**
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

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 13.02.2013

Version number 1

Revision: 13.02.2013

Trade name: illbruck PU230

(Contd. of page 1)

- **Hazard-determining components of labelling:**
diphenylmethanediisocyanate, isomers and homologues
- **Risk phrases:**
 - 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.
- **Safety phrases:**
 - 23 Do not breathe vapour/spray.
 - 25 Avoid contact with eyes.
 - 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 - 36/37 Wear suitable protective clothing and gloves.
 - 38 In case of insufficient ventilation, wear suitable respiratory equipment.
 - 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- **Special labelling of certain preparations:**
Contains isocyanates. See information supplied by the manufacturer
- **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:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 9016-87-9 EINECS: 202-966-0	diphenylmethanediisocyanate, isomers and homologues  Xn R20-40-48/20;  Xn R42/43;  Xi R36/37/38 Carc. Cat. 3  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	30- <50%
CAS: 28553-12-0 EINECS: 249-079-5	di-"isononyl" phthalate substance with a Community workplace exposure limit	20- <30%

- **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.

GB

(Contd. on page 3)

Trade name: illbruck PU230

(Contd. of page 2)

4 First aid measures

· 4.1 Description of first aid measures

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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 skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.

· 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.

· 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:** 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

Formation of toxic gases is possible during heating or in case of fire.

Carbon monoxide (CO)

Carbon dioxide

Nitrogen oxides (NO_x)

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

Remove persons from danger area.

· 6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31




Printing date 13.02.2013

Version number 1

Revision: 13.02.2013

Trade name: illbruck PU230

See Section 13 for disposal information.

(Contd. of page 3)

7 Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **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 ³ Long-term value: 0.02 mg/m ³ Sen; as -NCO
28553-12-0 di-"isononyl" phthalate	
WEL	Long-term value: 5 mg/m ³

- **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.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

- **Material of gloves**
PE gloves
Recommended thickness of the material: ≥ 0.02 mm

(Contd. on page 5)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 13.02.2013

Version number 1

Revision: 13.02.2013

Trade name: illbruck PU230

(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.
- **For the permanent contact gloves made of the following materials are suitable:**
Butyl rubber, BR
Natural rubber, NR
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
PE gloves
- **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:	Fluid
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.

· pH-value:	Not determined.
-------------	-----------------

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	> 325°C

· Flash point:	190°C
----------------	-------

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

· Ignition temperature:	400°C
-------------------------	-------

· Decomposition temperature:	Not determined.
------------------------------	-----------------

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

· Danger of explosion:	Product does not present an explosion hazard.
------------------------	---

· Explosion limits:

Lower:	0.1 Vol %
Upper:	0.2 Vol %

· Vapour pressure:	Not determined.
--------------------	-----------------

· Density:	Not determined.
------------	-----------------

· Relative density	Not determined.
--------------------	-----------------

· Vapour density	Not determined.
------------------	-----------------

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 13.02.2013

Version number 1

Revision: 13.02.2013

Trade name: illbruck PU230

(Contd. of page 5)

- | | |
|---|--|
| · Evaporation rate | Not determined. |
| · Solubility in / Miscibility with water: | Not miscible or difficult to mix. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · 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, isomers 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

GB

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 13.02.2013

Version number 1

Revision: 13.02.2013

Trade name: illbruck PU230

(Contd. of page 6)

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.

· Additional ecological information:

· General notes:

Do not allow undiluted product or large quantities of it 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.

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.

· Waste disposal key: UK : H4 H5 H7

· European waste catalogue

08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

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

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 13.02.2013

Version number 1

Revision: 13.02.2013

Trade name: illbruck PU230

(Contd. of page 7)

- | | |
|--|-----------------|
| · 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 MARPOL 73/78 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.
 "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).
- **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.

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**

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.
.....	
R20	Harmful by inhalation.
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.
- **Previous Revision Date:** 15-10-2010