

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.05.2020

Version number 7

Revision: 11.05.2020

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

· 1.1 Product identifier

· Trade name: illbruck PU220

· MSDS code: A-I-PU220

· 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 Glue/ Sising agent

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Tremco CPG Netherlands B.V.

tremco illbruck Productie B.V.

Vlietskade 1032, 4241 WC Arkel

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msds@tremco-illbruck.com

· Further information obtainable from:

Tremco CPG UK Ltd

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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 it is recommended to call NHS 111 (England/Wales/Scotland), your local GP/pharmacist (NI), 01 809 2166 (ROI), or otherwise to contact a doctor.

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

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

Skin Sens. 1 H317 May cause an allergic skin reaction.

Carc. 2 H351 Suspected of causing cancer.

STOT SE 3 H335 May cause respiratory irritation.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

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

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.05.2020

Version number 7

Revision: 11.05.2020

Trade name: illbruck PU220

(Contd. of page 1)

- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Danger

- **Contains:**

diphenylmethanediisocyanate, isomers and homologues

- **Hazard statements**

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

- **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 In case of inadequate ventilation wear respiratory protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

- **Supplemental information:**

EUH204 Contains isocyanates. May produce an allergic reaction.

EUH208 Contains diphenylmethanediisocyanate, isomers and homologues. 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: 9016-87-9	diphenylmethanediisocyanate, isomers and homologues	50-<75%
EC number: 618-498-9	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	

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.05.2020

Version number 7

Revision: 11.05.2020

Trade name: illbruck PU220

(Contd. of page 2)

CAS: 9082-00-2	Ethoxylated/propoxylated glycerol Acute Tox. 4, H302	10-<20%
CAS: 25791-96-2 NLP: 500-044-5	Glycerol, propoxylated Acute Tox. 4, H302	10-<20%

- **SVHC -**

- **Additional information:**

For the wording of the listed hazard phrases refer to section 16.

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

Carbon dioxide (CO₂)

SECTION 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:** Do not induce vomiting; call for medical help immediately.

- **4.2 Most important symptoms and effects, both acute and delayed**

Harmful if inhaled.

Irritating to eyes, respiratory system and skin.

May cause an allergic skin reaction.

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

May cause damage to organs through prolonged or repeated exposure.

Suspected of causing cancer.

- **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:** 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.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.05.2020

Version number 7

Revision: 11.05.2020

Trade name: illbruck PU220

(Contd. of page 3)

Carbon monoxide (CO)

Carbon dioxide (CO₂)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.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Avoid contact with the eyes and skin.

Ensure adequate ventilation.

- **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 of contaminated material as waste according to Section 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.

See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Avoid contact with the eyes and skin.

Avoid breathing vapours/spray.

Use only in well-ventilated areas.

Do not eat, drink, smoke or sniff while working.

Ensure that washing facilities are available at the work place.

Wear suitable protective clothing and gloves.

- **Information about fire - and explosion protection:**

The usual precautionary measures are to be adhered to when handling chemicals.

- **7.2 Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:** Store only in unopened original receptacles.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

- **7.3 Specific end use(s)** No further relevant information available.

GB

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.05.2020

Version number 7

Revision: 11.05.2020

Trade name: illbruck PU220

(Contd. of page 4)

SECTION 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:**

CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues

WEL	Short-term value: 0.07 mg/m ³ Long-term value: 0.02 mg/m ³ Sen; as -NCO
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· **DNELs**

· **Long term effects**

CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues

Inhalative	industrial	0.05 mg/m ³ (workers) (systemic and local effects)
	consumer	0.025 mg/m ³ (general public) (systemic and local effects)

· **Short term effects**

CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues

Oral	consumer	20 mg/kg/24h (consumers) (systemic effects)
	industrial	50 mg/kg/24h (workers) (systemic and local effects)
Dermal	consumer	25 mg/kg/24h (consumers) (systemic effects)
	industrial	0.1 mg/m ³ (workers) (systemic and local effects)
Inhalative	consumer	0.05 mg/m ³ (general public) (local effects)

· **PNECs**

CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues

PNEC	1 mg/L (fresh water)
	10 mg/L (intermittent release)
	0.1 mg/L (salt water)

· **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.
Do not eat, drink, smoke or sniff while working.
Wear suitable protective clothing and gloves.

· **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.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.05.2020

Version number 7

Revision: 11.05.2020

Trade name: illbruck PU220

(Contd. of page 5)

Filter A/P2

For further guidance,
please refer to HSE HSG53 "Respiratory Protective Equipment at work - A Practical Guide".

- **Protection of hands:**



Protective gloves

- **Material of gloves**

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.7 mm

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

- **Penetration time of glove material**

For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes
(Permeation according to EN 16523-1:2015: Level 6).

- **Eye protection:**



Tightly sealed goggles

- **Body protection:**



Protective work clothing

SECTION 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.

- **Melting point/freezing point:** Undetermined.

- **Initial boiling point and boiling range:** 209.3 °C

- **Flash point:** 215 °C

- **Flammability (solid, gas):** Not applicable.

- **Ignition temperature:** 400 °C

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.05.2020

Version number 7

Revision: 11.05.2020

Trade name: illbruck PU220

(Contd. of page 6)

· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	0.1 Vol %
Upper:	0.2 Vol %
· Vapour pressure:	Not determined.
· Density at 20 °C:	1.15 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Immiscible / difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
VOC (EU)	0.5 g/l
VOC (EC)	0.04 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **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:**
Formation of toxic gases is possible during heating or in case of fire.
Carbon monoxide and carbon dioxide
Nitrogen oxides (NO_x)
Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:
Hydrogen cyanide (prussic acid)

GB

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.05.2020

Version number 7

Revision: 11.05.2020

Trade name: illbruck PU220

(Contd. of page 7)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Harmful if inhaled.

LD/LC50 values relevant for classification:

CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues

Oral	LD50	>10,000 mg/kg (rat)
Dermal	LD50	>10,000 mg/kg (rabbit)
Inhalative	LC50/4 h	1.5 mg/L (rat)

CAS: 9082-00-2 Ethoxylated/propoxylated glycerol

Oral	LD50	>500 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

CAS: 25791-96-2 Glycerol, propoxylated

Oral	LD50	1,999 mg/kg (rat)
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Primary irritant effect:

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

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

May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity

 Based on available data, the classification criteria are not met.

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

 Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

 Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues

LC0/96 h	>1,000 mg/L (brachydanio rerio)
EC50/24 h	>1,000 mg/L (daphnia magna)

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.05.2020

Version number 7

Revision: 11.05.2020

Trade name: illbruck PU220

(Contd. of page 8)

CAS: 9082-00-2 Ethoxylated/propoxylated glycerol

LC50/48 h	>100 mg/L (brachydanio rerio)
EC50/48 h	>100 mg/L (daphnia magna)
EC50/72 h	>1,000 mg/L (scenedesmus capricornutum)

- **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:****CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues**

NOEC/21 d	>10 mg/L (daphnia magna)
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- **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.

SECTION 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. Disposal must be made according to official regulations.

· **European waste catalogue**

08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
15 01 02	plastic packaging
HP4	Irritant - skin irritation and eye damage
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP7	Carcinogenic
HP13	Sensitising

- **Uncleaned packaging:**
- **Recommendation:** Dispose of packaging according to regulations on the disposal of packagings.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, ADN, IMDG, IATA** Void

(Contd. on page 10)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.05.2020

Version number 7

Revision: 11.05.2020

Trade name: illbruck PU220

(Contd. of page 9)

· 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 Marpol and the IBC Code	Not applicable.
· UN "Model Regulation":	Void

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).
"REACH" Regulation (EC) No 1907/2006 (OJ L 396, 30.12.2006, p.1, with subsequent amendments).
COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.
HSE EH40/2005 Workplace Exposure Limits (as amended)
Guidance on the classification and assessment of waste | Technical Guidance WM3 (1st edition 2015)
2001/118/EC as regards the list of wastes
2008/98/EC on waste
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **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**
H302 Harmful if swallowed.

(Contd. on page 11)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.05.2020

Version number 7

Revision: 11.05.2020

Trade name: illbruck PU220

(Contd. of page 10)

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.

- **Department issuing SDS:**

Prepared and verified in accordance with "REACH" Regulation (EC) No 1907/2006, Annex II, Part A, 0.2.3.

- **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)

PNEC: Predicted No-Effect Concentration (REACH)

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

Acute Tox. 4: Acute toxicity - inhalation – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

- *** Data compared to the previous version altered.**