

Safety data sheet

acc. (EC) 1907/2006, as amended by UK SI 2019/758

Printing date 01.04.2022

Version number 6

Revision: 01.04.2022

SECTION 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**

No further relevant information available.

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

- **1.3 Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

Tremco CPG Netherlands B.V.

Vlietskade 1032, 4241 WC Arkel

T: +31 (0) 183568000, F: +31 (0) 183568100

msds@cpg-europe.com

- **Further information obtainable from:**

Tremco CPG UK Ltd

Coupland Road, Hindley Green, Wigan, WN2 4HT

T: +44 (0) 1942251400, F: +44 (0) 1942251410

www.cpg-europe.com, info.uk@cpg-europe.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.

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- **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.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P313 Get medical advice/attention.

- **Supplemental information:**

EUH204 Contains isocyanates. May produce an allergic reaction.

As from 24 August 2023 adequate training is required before industrial or professional use.

- **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 EC number: 618-498-9	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	50-<75%
CAS: 6425-39-4 EINECS: 229-194-7 Reg.nr.: 01-2119969278-20-xxxx	2,2'-dimorpholinodiethylether Eye Irrit. 2, H319	1-<5%

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- **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:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

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

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

Allergic reactions

Breathing difficulty

Nausea

- **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 (CO₂)

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**

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

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- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Remove persons from danger area.
Wear protective clothing.
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.
Do not seal receptacles gas-tight.
- **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.
Open and handle receptacle with care.
Avoid contact with the eyes and skin.
- **Information about fire - and explosion protection:** The product is not flammable.
- **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:** 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.
Storage temperature: +5°C to +25°C
- **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· 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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· 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)
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CAS: 6425-39-4 2,2'-dimorpholinodiethylether

PNEC	0.1 mg/L (fresh water) (assessment factors) 100 mg/L (sewage treatment plant) (assessment factors) 1 mg/L (intermittent release) (assessment factors) 0.01 mg/L (marine) (assessment factors)
PNEC	1.58 mg/kg (soil) (equilibrium partitioning) 0.82 mg/kg (sediment (salt water)) (equilibrium partitioning) 8.2 mg/kg (sediment (fresh water)) (equilibrium partitioning) 10 mg/kg (secondary poisoning) (assessment factors)

· Additional information:

The lists valid during the making were used as basis.
HSE EH40/2005 Workplace Exposure Limits (as amended)

· 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.

· 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.

Filter AXP3

For further guidance,

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

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- **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:	Viscous
Colour:	Amber coloured
Odour:	Characteristic

- **pH-value:**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.

- **Flash point:** >200 °C

- **Explosive properties:** Product does not present an explosion hazard.

- **Density at 20 °C:** 1.1 g/cm³

- **Solubility in / Miscibility with water:** Immiscible / difficult to mix.

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- | | |
|--------------------------------|--|
| · Viscosity: | |
| Dynamic at 20 °C: | 6000 cps |
| · 9.2 Other information | 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 water.
Reacts with strong acids and alkali.
- **10.4 Conditions to avoid** Water / moisture.
- **10.5 Incompatible materials:** polyethylene, polypropylene, Teflon® or nylon.
- **10.6 Hazardous decomposition products:** Poisonous gases/vapours

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)

CAS: 6425-39-4 2,2'-dimorpholinodiethylether

Oral	LD50	2,025 mg/kg (rat)
Dermal	LD50	3,038 mg/kg (rabbit)

- **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.
- **Additional toxicological information:**
Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

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- **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)

CAS: 6425-39-4 2,2'-dimorpholinodiethylether

LC50/96 h 2,150 mg/L (fish) (OECD 203)

EC50/48 h >100 mg/L (daphnia magna) (OECD 202)

- **12.2 Persistence and degradability** Moderately / partly biodegradable
- **12.3 Bioaccumulative potential** Low potential for accumulating in organisms
- **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)

- **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

HP4 Irritant - skin irritation and eye damage

HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP7 Carcinogenic

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HP13	Sensitising
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- **Uncleaned packaging:**
- **Recommendation:**
 Dispose of packaging according to regulations on the disposal of packagings.
 Packagings that may not be cleansed are to be disposed of in the same manner as the product.
 Non contaminated packagings may be recycled.

SECTION 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 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**
 "EU-CLP" Regulation (EC) No 1272/2008 (OJ L 353, 31.12.2008, p.1)
 "EU-REACH" Regulation (EC) No 1907/2006 (OJ L 396, 30.12.2006, p.1, with subsequent amendments)
 COMMISSION REGULATION (EU) 2020/878 of 18 June 2020.
 HSE EH40/2005 Workplace Exposure Limits (as amended)
 Guidance on the classification and assessment of waste | Technical Guidance WM3 (1st edition 2015)
 "GB-CLP" The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019
 "UK-REACH" The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020
- **National regulations:**
- **Information about limitation of use:**
 Employment restrictions concerning juveniles must be observed.

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Employment restrictions concerning pregnant and lactating women must be observed.

- **Other regulations, limitations and prohibitive regulations** No further relevant information available.
- **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**

- 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.

- **Previous Revision Date:** 15-10-2010

- **Abbreviations and acronyms:**

- ADR: Accord relatif au transport international 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)
- 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 – 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.**