

## Safety data sheet

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

Printing date 16.03.2020

Version number 5

Revision: 16.03.2020

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

- **1.1 Product identifier**

- **Trade name:** illbruck PU038

- **MSDS code:** A-I-PU038

- **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 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 it is recommended to call NHS 111 (England/Wales/Scotland), 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**

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**

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**

P201 Obtain special instructions before use.

P260 Do not breathe mist/vapours/spray.

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

P284 Wear respiratory protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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

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

P308+P313 IF exposed or concerned: Get medical advice/attention.

- **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:**

Dual component product in coaxial packaging.

Mixture of substances listed below with non-hazardous additions.

- **Dangerous components:**

CAS: 9016-87-9	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	30-<50%
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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 (CO<sub>2</sub>)

#### SECTION 4: First aid measures

· **4.1 Description of first aid measures**· **General information:**

Take affected persons out of danger area and lay down.

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

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Treat affected skin with cotton wool or cellulose. Then wash and rinse thoroughly with water and a mild cleaning agent.

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**

Breathing difficulty

Coughing

Irritant to skin and mucous membranes.

Allergic reactions

Asthma attacks

· **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:**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**

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

In case of fire, the following can be released:

Carbon monoxide (CO)

Nitrogen oxides (NO<sub>x</sub>)

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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.

- **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**

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

Particular danger of slipping on leaked/spilled product.

- **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).

Pick up mechanically.

Do not seal receptacles gas-tight.

Dispose of contaminated material as waste according to Section 13.

- **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.

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 the original receptacle.

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

- **Further information about storage conditions:**

Store in dry conditions.

Keep container tightly sealed.

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

### SECTION 8: Exposure controls/personal protection

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

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#### · 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 <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> 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 <sup>3</sup> (workers) (systemic and local effects)
	consumer	0.025 mg/m <sup>3</sup> (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)
Dermal	industrial	50 mg/kg/24h (workers) (systemic and local effects)
	consumer	25 mg/kg/24h (consumers) (systemic effects)
Inhalative	industrial	0.1 mg/m <sup>3</sup> (workers) (systemic and local effects)
	consumer	0.05 mg/m <sup>3</sup> (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 Occupational Exposure Limit Values for possible hazards during processing:

Carbon dioxide (CO<sub>2</sub>)

##### · 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:

Do not breathe vapour.  
Do not eat or drink while working.  
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:

Short term filter device:

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Filter A/P2

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

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

Butyl rubber, BR

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.

Recommended thickness of the material:  $\geq 0.50$  mm

- **Penetration time of glove material**

Value for the permeation: Level  $\leq 480$ 

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **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:**

Pasty

**Colour:**

According to product specification

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· <b>Odour:</b>	Recognisable
· <b>pH-value:</b>	Not applicable.
· <b>Melting point/freezing point:</b>	Undetermined.
· <b>Flash point:</b>	Not applicable.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Density at 20 °C:</b>	1.6 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with water:</b>	Insoluble.
· <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:**  
To avoid thermal decomposition do not overheat.  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
Reacts with water.  
Danger of bursting.
- **10.4 Conditions to avoid** Water / moisture.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· <b>LD/LC50 values relevant for classification:</b>		
Inhalative	ATE	>20 mg/l (not specified)

<b>CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues</b>		
Oral	LD50	>10,000 mg/kg (rat)
Dermal	LD50	>10,000 mg/kg (rabbit)
Inhalative	LC50/4 h	1.5 mg/L (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye irritation.

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- **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 &gt;1,000 mg/L (brachydanio rerio)

EC50/24 h &gt;1,000 mg/L (daphnia magna)

### 12.2 Persistence and degradability

Heavily biodegradable

The product is instable in water. The declaration of the elimination also refers to the hydrolysis products

### 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 &gt;10 mg/L (daphnia magna)

#### Remark:

Harmful to fish

#### Additional ecological information:

#### General notes:

Harmful to aquatic organisms

The material is harmful to the environment.

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.

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### 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.

- **European waste catalogue**

08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
08 05 01*	waste isocyanates
15 01 10*	packaging containing residues of or contaminated by hazardous substances
HP4	Irritant - skin irritation and eye damage
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP7	Carcinogenic
HP13	Sensitising

- **Uncleaned packaging:**

- **Recommendation:**

Disposal must be made according to official regulations.

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

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### 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**  
 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)  
 PNEC: Predicted No-Effect Concentration (REACH)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent

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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.**

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