

Printing date 11.02.2022 Version number 7 Revision: 11.02.2022

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

· 1.1 Product identifier

· Trade name: illbruck PU013

· MSDS code: A-I-PU013

· 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. 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

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 the respiratory system 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:

Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl isocyanate o-(p-isocyanatobenzyl)phenyl isocyanate

4,4'-methylenediphenyl diisocyanate

2,2'-methylenediphenyl diisocyanate

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 the respiratory system through prolonged or repeated exposure.

· Precautionary statements

P261 Avoid breathing vapours. P280 Wear protective gloves.

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.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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

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.

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| | (Con | td. of page 2) |
|---|---|----------------|
| · Dangerous components: | | |
| EC number: 905-806-4 Reg.nr.: 01-2119457015-45-xxxx | Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl isocyanate 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 | 20-<30% |
| CAS: 5873-54-1 EINECS: 227-534-9 Reg.nr.: 01-2119480143-45-xxxx | o-(p-isocyanatobenzyl)phenyl isocyanate 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 | 10-<20% |
| CAS: 101-68-8 EINECS: 202-966-0 Reg.nr.: 01-2119457014-47-xxxx | 4,4'-methylenediphenyl diisocyanate 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 | 10-<20% |
| CAS: 2536-05-2 EINECS: 219-799-4 | 2,2'-methylenediphenyl diisocyanate 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% |

· 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: 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.

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 eve contact:

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

· After swallowing:

Rinse out mouth with water.

If symptoms persist consult doctor.

- · Information for doctor: No further relevant information available.
- · 4.2 Most important symptoms and effects, both acute and delayed

Irritating to respiratory system.

May cause an allergic skin reaction.

Irritant to skin and mucous membranes.

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Risk of serious damage to eyes.

May cause damage to the respiratory system through prolonged or repeated exposure.

- · 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:

Water

Foam

- · For safety reasons unsuitable extinguishing agents: No further relevant information available.
- 5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NOx)

Carbon monoxide (CO)

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

Particular danger of slipping on leaked/spilled product.

Ensure adequate ventilation.

Use respiratory protective device against the effects of fumes/dust/aerosol.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Use neutralising agent.

Dilute with plenty water.

Allow to solidify. Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

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

Do not seal receptacles gas-tight.

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.

Open and handle receptacle with care.

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- · Handling: As from 24 August 2023 adequate training is required before industrial or professional use.
- 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:

Store in a cool location.

Store only in the original receptacle.

Provide ventilation for receptacles.

· Information about storage in one common storage facility:

Do not store together with acids.

Do not store together with alkalis (caustic solutions).

Store away from oxidising agents.

Further information about storage conditions:

Keep container tightly sealed.

Protect from humidity and water.

Store receptacle in a well ventilated area.

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

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:

CAS: 5873-54-1 o-(p-isocyanatobenzyl)phenyl isocyanate

WEL Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³

Sen; as -NCO

CAS: 101-68-8 4,4'-methylenediphenyl diisocyanate

WEL Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³

Sen; as -NCO

CAS: 2536-05-2 2,2'-methylenediphenyl diisocyanate

WEL Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³ Sen; as -NCO

· PNECs

Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl isocyanate

PNEC 1 mg/L (fresh water)
1 mg/L (sewage treatment plant)
1 mg/L (soil)

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|----------|---|
| | 10 mg/L (sporadic release) |
| | 0.1 mg/L (salt water) |
| PNEC | mg/kg dwt (sediment (salt water)) (exposure not expected) |
| | mg/kg dwt (sediment (fresh water)) (exposure not expected) |
| | 873-54-1 o-(p-isocyanatobenzyl)phenyl isocyanate |
| PNEC | 1 mg/L (fresh water) |
| | 1 mg/L (sewage treatment plant) |
| | 10 mg/L (intermittent release) |
| | 0.1 mg/L (salt water) |
| PNEC | 1 mg/kg (soil) |
| CAS: 1 | 01-68-8 4,4'-methylenediphenyl diisocyanate |
| PNEC | 1 mg/L (fresh water) |
| | 1 mg/L (sewage treatment plant) |
| | 10 mg/L (intermittent release) |
| | 0.1 mg/L (salt water) |
| PNEC | 1 mg/kg (soil) |
| · Ingred | ients with biological limit values: |
| CAS: 5 | 873-54-1 o-(p-isocyanatobenzyl)phenyl isocyanate |
| BMGV | 1 µmol creatinine/mol |
| | Medium: urine |
| | Sampling time: At the end of the period od exposure Parameter: isocyanate-derived diamine |
| CAS: 1 | 01-68-8 4,4'-methylenediphenyl diisocyanate |
| | 1 µmol creatinine/mol |
| DIVIOV | Medium: urine |
| | Sampling time: At the end of the period od exposure |
| | Parameter: isocyanate-derived diamine |
| | 2536-05-2 2,2'-methylenediphenyl diisocyanate |
| BMGV | 1 μmol creatinine/mol |
| | Medium: urine |
| | Sampling time: At the end of the period od exposure Parameter: isocyanate-derived diamine |
| | i didificter. Isocyanate-derived didiffilite |

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Clean skin thoroughly immediately after handling the product.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

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Do not eat or drink while working.

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.

Short term filter device:

Suitable respiratory protective device recommended.

Filter A

Filter P

For further guidance,

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

· Protection of hands:



Protective gloves

Material of gloves

Nitrile rubber, NBR

Recommended thickness of the material: $\geq 0.4 \text{ mm}$

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.5 mm

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:



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: Liquid

Colour: According to product specification

· Odour: Light

· Odour threshold: Not determined.

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| | | (Contd. of page 7) |
|--|--|--------------------|
| pH-value: Melting point/freezing point: Initial boiling point and boiling range: | Not determined. Undetermined. > 200 °C | |
| Flash point: | Not applicable. | |
| · Flammability (solid, gas): | Not applicable. | |
| · Decomposition temperature: | > 140 °C | |
| · Auto-ignition temperature: | Product is not selfigniting. | |
| · Explosive properties: | Product does not present an explosion hazard. | |
| · Vapour pressure: | Not determined. | |
| · Density at 20 °C: · Relative density · Vapour density · Evaporation rate | 1.07 g/cm³ Not determined. Not determined. Not determined. | |
| · Solubility in / Miscibility with water: | Immiscible / difficult to mix. | |
| · Partition coefficient: n-octanol/water: | Not determined. | |
| · Viscosity: Kinematic: | Not determined. | |
| · 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 Reacts with water.
- 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: Reacts with alcohols, amines, aqueous acids and alkalis.
- · 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.

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|--------------------|--|--|--|
| · LD/LC50 | values rele | evant for classification: | |
| Reaction isocyanat | | ,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl | |
| Oral | LD50 | >2,000 mg/kg (rat) | |
| Dermal | LD50 | >9,400 mg/kg (rabbit) | |
| CAS: 587 | CAS: 5873-54-1 o-(p-isocyanatobenzyl)phenyl isocyanate | | |
| Oral | LD50 | >9,400 mg/kg (rabbit) (OECD 402) | |
| | | >2,000 mg/kg (rat) | |
| CAS: 101 | CAS: 101-68-8 4,4'-methylenediphenyl diisocyanate | | |
| Oral | LD50 | >15,000 mg/kg (rat) | |
| | LC50/1 h | 11 mg/L (rat) | |

- · 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:
- · CMR effects (carcinogenity, 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 the respiratory system 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: | |
|-----------------------------|---|
| Reaction mass of isocyanate | 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl |
| LC50/96 h (static) | >1,000 mg/L (brachydanio rerio) (OESO 203) |
| EC50/24 h (static) | >1,000 mg/L (daphnia magna) (OESO 202) |
| EC50/72 h (static) | >1,640 mg/L (scenedesmus subspicatus) (OESO 201) |

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| | | (Contd. of page 9) |
|---------------|---------------------------------------|--------------------|
| CAS: 101-68-8 | 4,4'-methylenediphenyl diisocyanate | |
| LC50/96 h | >1,000 mg/L (brachydanio rerio) | |
| LC50/24 h | >500 mg/L (brachydanio rerio) | |
| EC50 | >100 mg/L (daphnia magna) | |
| EC50/24 h | >1,000 mg/L (daphnia magna) | |
| EC50/72 h | >1,640 mg/L (desmodesmus subspicatus) | |

- 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.
- · Ecotoxical effects:

Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl) phenyl isocyanate

| LC50/14 d | >1,000 mg/kg (eisenia foetida) (OESO 207) |
|-----------|---|
| NOEC/21 d | >10 mg/L (daphnia magna) (OESO 202) |
| NOEC/14 d | >1,000 mg/kg (avea sativa) (OESO 208) |
| | >1,000 mg/kg (lactuca sativa) (OESO 208) |
| | |

CAS: 101-68-8 4,4'-methylenediphenyl diisocyanate

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.

| • European waste catalogue 08 04 09* waste adhesives and sealants containing organic solvents or other hazardous substances HP4 Urritant - skin irritation and eve damage | | |
|---|--|--|
| 08 04 09* | waste adhesives and sealants containing organic solvents or other hazardous substances | |
| HP4 | 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.

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| SECTION 14: Transport information | on | |
|--|-----------------|--|
| · 14.1 UN-Number · ADR, ADN, IMDG, IATA | Void | |
| · 14.2 UN proper shipping name | | |
| ADR | Void | |
| | Void | |
| · 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 Anno | ex 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.

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.

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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 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.

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