

Safety data sheet
acc. to (EC) No 1907/2006, as amended by UK SI 2019/758

Printing date 04.11.2021

Version number 5

Revision: 04.11.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** illbruck PU050**MSDS code:** A-I-PU050**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**

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.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

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

Hazard pictograms

GHS08

Signal word Danger**Contains:**

4,4'-methylenediphenyl diisocyanate

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Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Hazard statements

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

H317 May cause an allergic skin reaction.

Precautionary statements

P261 Avoid breathing vapours.

P280 Wear protective gloves.

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

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.

Dangerous components:

CAS: 1330-20-7 EC number: 905-588-0 Reg.nr.: 01-2119488216-32-xxxx	xylene (mix) Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	5-<10%
CAS: 1305-78-8 EINECS: 215-138-9 Reg.nr.: 01-2119475325-36-xxxx	calcium oxide Skin Corr. 1C, H314; Eye Dam. 1, H318	1-<5%
CAS: 7429-90-5 EINECS: 231-072-3 Reg.nr.: 01-2119529243-45-xxxx	aluminium powder (stabilised) Flam. Sol. 1, H228; Water-react. 2, H261	1-<5%
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	0.1-<1%
CAS: 1065336-91-5 EC number: 915-687-0 Reg.nr.: 01-2119491304-40-xxxx	Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1A, H317	0.1-<1%

SVHC -

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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:

Fillers are encapsulated within the liquid and therefore not expected to be released from the product under normal conditions of use.

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 eye contact:

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

After swallowing: If symptoms persist consult doctor.

Information for doctor: No further relevant information available.

4.2 Most important symptoms and effects, both acute and delayed

Dizziness

Dizziness

Headache

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

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

Carbon monoxide (CO)

Carbon dioxide (CO₂)

Nitrogen oxides (NO_x)

Hydrogen cyanide (HCN)

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.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation.
Keep away from ignition sources.
- **6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Send for recovery or disposal in suitable receptacles.
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.
- **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:** Provide ventilation for receptacles.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in dry conditions.
Store in a cool place.
- **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: 1330-20-7 xylene (mix)

WEL	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV
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CAS: 101-68-8 4,4'-methylenediphenyl diisocyanate

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: 1330-20-7 xylene (mix)**

PNEC	0.327 mg/L (fresh water)
	6.58 mg/L (sewage treatment plant)
	0.327 mg/L (intermittent release)
	0.327 mg/L (salt water)
PNEC	2.31 mg/kg (soil)
	12.46 mg/kg (sediment (salt water))
	12.46 mg/kg (sediment (fresh water))

CAS: 101-68-8 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)

· Ingredients with biological limit values:**CAS: 1330-20-7 xylene (mix)**

BMGV	650 mmol/mol creatinine
	Medium: urine
	Sampling time: post shift
	Parameter: methyl hippuric acid

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

BMGV	1 µmol creatinine/mol
	Medium: urine
	Sampling time: At the end of the period of exposure
	Parameter: isocyanate-derived diamine

· Additional Occupational Exposure Limit Values for possible hazards during processing:Carbon dioxide (CO₂)**· Additional information:**

Fillers are encapsulated within the liquid and therefore not expected to be released from the product under normal conditions of use.

The lists valid during the making were used as basis.

· 8.2 Exposure controls**· Personal protective equipment:****· General protective and hygienic measures:**

Avoid close or long term contact with the skin.

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

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

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

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- **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:

Filter AB

Use suitable respiratory protective device in case of insufficient ventilation.

For further guidance,

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

- **Protection of hands:**

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**

PVA gloves

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.

- **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:** Goggles recommended during refilling

- **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

- **Odour:**

Characteristic

- **Odour threshold:**

Not determined.

- **pH-value:**

Not determined.

- **Melting point/freezing point:**

Undetermined.

- **Initial boiling point and boiling range:**

137-143 °C

- **Flash point:**

>75 °C

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· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	> 200 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	0.6 Vol %
Upper:	7.0 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 (EC)	<9.50 %
· 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 alcohols, amines, aqueous acids and alkalis.
- **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.

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 relevant for classification:**

CAS: 1330-20-7 xylene (mix)

Oral	LD50	4,300 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rabbit)

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

Oral	LD50	>15,000 mg/kg (rat)
Inhalative	LC50/4 h	0.49 mg/L (rat)

· **Primary irritant effect:**

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

· **Respiratory or skin sensitisation**

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

May cause an allergic skin reaction.

· **Additional toxicological information:**

Fillers are encapsulated within the liquid and therefore not expected to be released from the product under normal conditions of use.

Rabbit eyes: not irritating (OECD 405)

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

CAS: 1330-20-7 xylene (mix)

LC50/96 h	3.77 mg/L (fish)
EC50/48 h	7.4 mg/L (daphnia magna)
EC50/72 h	10 mg/L (skelettonema costatum)

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)

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CAS: 1065336-91-5 Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

LC50/96 h	7.9 mg/L (oncorhynchus mykiss)
	0.9 mg/L (brachydanio rerio)
	0.97 mg/L (lepomis macrochirus)
EC50/24 h	20 mg/L (daphnia magna)
EC50/72 h	1.68 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.

· **Ecotoxicological effects:**

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

NOEC/21 d	>10 mg/L (daphnia magna)
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CAS: 1065336-91-5 Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

NOEC/21 d	1 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**
Disposal must be made according to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09
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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

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

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· 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.
· Transport/Additional information:	
· ADR	
· Remarks:	2.2.41.1.5: < 2.2 mm/s
· IMDG	
· Remarks:	2.4.2.2.2.1: < 2.2 mm/s
· IATA	
· Remarks:	3.4.1.1.2.1: < 2.2 mm/s
· 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.
- **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

H226 Flammable liquid and vapour.
H228 Flammable solid.
H261 In contact with water releases flammable gases.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
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.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

· 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)
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
Flam. Liq. 3: Flammable liquids – Category 3
Flam. Sol. 1: Flammable solids – Category 1
Water-react. 2: Substances and mixtures which in contact with water emit flammable gases – Category 2
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1C: Skin corrosion/irritation – Category 1C
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1

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Skin Sens. 1A: Skin sensitisation – Category 1A

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

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

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

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