

# Safety data sheet according to UK REACH

Printing date 22.10.2024

Version number 9 (replaces version 8)

Revision: 22.10.2024

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

- **1.1 Product identifier**
- **Trade name** UNIVERSALABDICHTUNG PU 500 KOMP. B
- **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** Hardening agent/ Curing agent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
MUREXIN GmbH  
Franz v. Furtenbachstr. 1  
A-2700 Wiener Neustadt  
Tel.: +43 (0)2622/27401
- **Informing department:** chemikalieninfo@murexin.com
- **1.4 Emergency telephone number:**  
UK National poisons Emergency number.: +44 (0) 870 600 6266

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 Carc. 2 H351 Suspected of causing cancer.  
 STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



Acute Tox. 4 H332 Harmful if inhaled.  
 Skin Irrit. 2 H315 Causes skin irritation.  
 Eye Irrit. 2 H319 Causes serious eye irritation.  
 Skin Sens. 1 H317 May cause an allergic skin reaction.  
 STOT SE 3 H335 May cause respiratory irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
diphenylmethanediisocyanate, isomeres and homologues  
Reaction mass of 4,4'-methylenediphenyl diisocyanate and O-(p-isocyanate benzyl)phenyl isocyanate  
diphenylmethane-4,4'-di-isocyanate
- **Hazard statements**  
H332 Harmful if inhaled.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.

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*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***P101 If medical advice is needed, have product container or label at hand.**P102 Keep out of reach of children.**P103 Read carefully and follow all instructions.**P260 Do not breathe mist/vapours/spray.**P280 Wear protective gloves/protective clothing/eye protection/face protection.**P284 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.**P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***Additional information:***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 consisting of the following components with harmless additives.***Dangerous components:**

CAS: 9016-87-9	diphenylmethanediisocyanate, isomeres and homologues Consisting of: 101-68-8 diphenylmethane-4,4'-diisocyanate (37.5%); 5873-54-1 Diphenylmethane-2,4'-diisocyanate (3%); 2536-05-2 diphenylmethane-2,2'-diisocyanate (0.5%)  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 EUH204 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; C ≥ 5 %	50-100%
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EC number: 905-806-4 Reg.nr.: 01-2119457015-45-xxx	Reaction mass of 4,4'-methylenediphenyl diisocyanate and O-(p-isocyanate benzyl)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. 1B, H317; STOT SE 3, H335	10-25%
CAS: 101-68-8 EINECS: 202-966-0 Reg.nr.: 01-2119457014-47	diphenylmethane-4,4'-di-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 EUH204 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; C ≥ 5 %	≥5-<10%

### 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.

##### After inhalation

Supply fresh air and call for doctor for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

##### After skin contact

Instantly 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 doctor.

##### After swallowing

Call a doctor immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

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 fighting measures that suit the environment.

CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

Foam

##### For safety reasons unsuitable extinguishing agents

Water.

#### 5.2 Special hazards arising from the substance or mixture

Formation of poisonous gases during heating or in fires.

#### 5.3 Advice for firefighters

##### Protective equipment: Wear self-contained breathing apparatus.

##### Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Cool endangered containers with water spray jet.

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### SECTION 6: Accidental release measures

#### · 6.1 Personal precautions, protective equipment and emergency procedures

Put on breathing apparatus.

Wear protective clothing.

Ensure adequate ventilation

#### · 6.2 Environmental precautions:

Do not allow product to reach sewage system or water bodies.

Do not allow to enter the ground/soil.

Keep dirty washing water for appropriate disposal.

Inform respective authorities in case product reaches water or sewage system.

#### · 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 item 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 information on disposal.

### SECTION 7: Handling and storage

#### · 7.1 Precautions for safe handling

Keep containers tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Open and handle container with care.

Prevent formation of aerosols.

#### · Information about protection against explosions and fires:

Keep breathing equipment ready.

Keep ignition sources away - Do not smoke.

#### · 7.2 Conditions for safe storage, including any incompatibilities

##### · Storage

##### · Requirements to be met by storerooms and containers:

Store only in the original container.

Use containers with acid-proof ceramic lining.

##### · Information about storage in one common storage facility: Store away from foodstuffs.

##### · Further information about storage conditions:

Store in cool, dry conditions in well sealed containers.

Protect from heat and direct sunlight.

Store container in a well ventilated position.

##### · Storage class 10

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

### SECTION 8: Exposure controls/personal protection

#### · 8.1 Control parameters

##### · Components with critical values that require monitoring at the workplace:

##### 9016-87-9 diphenylmethanediisocyanate, isomeres 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

##### 101-68-8 diphenylmethane-4,4'-di-isocyanate

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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· **Ingredients with biological limit values:**

**101-68-8 diphenylmethane-4,4'-di-isocyanate**

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

· **Additional information:** The lists that were valid during the compilation were used as basis.

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures**

The usual precautionary measures should be adhered to in handling the chemicals.

Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Store protective clothing separately.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Filter A.

Filter P3.

· **Hand protection** Protective gloves.

· **Material of gloves**

Butyl rubber, BR

Nitrile rubber, NBR

· **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/face protection** Tightly sealed safety glasses.

· **Body protection:** Protective work clothing.

### SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Physical state**

Fluid

· **Colour:**

Brown

· **Smell:**

Characteristic

· **Melting point/freezing point:**

Not determined

· **Boiling point or initial boiling point and boiling range**

181.3 °C (Reaction mass of 4,4'-methylenediphenyl diisocyanate and O-(p-isocyanate benzyl)phenyl isocyanate)

· **Flammability**

Not determined.

· **Flash point:**

220 °C

· **Auto-ignition temperature:**

> 500 °C (9016-87-9 diphenylmethanediisocyanate, isomeres and homologues)

· **Decomposition temperature:**

Not determined.

· **pH**

Mixture reacts violently with water.

· **Viscosity:**

· **Kinematic viscosity**

Not determined.

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· <b>dynamic at 20 °C:</b>	85 mPas
· <b>Solubility</b>	
· <b>Water:</b>	not miscible
· <b>Steam pressure at 20 °C:</b>	0 hPa (Reaction mass of 4,4'-methylenediphenyl diisocyanate and O-(p-isocyanate benzyl)phenyl isocyanate)
· <b>Vapour pressure at 50 °C:</b>	>0 hPa
· <b>Density and/or relative density</b>	
· <b>Density at 25 °C</b>	1.23 g/cm <sup>3</sup>
· <b>9.2 Other information</b>	
· <b>Appearance:</b>	
· <b>Form:</b>	Fluid
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Self-inflammability:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product is not explosive.
· <b>Solvent content:</b>	
· <b>Solids content:</b>	7.0 %
· <b>Information with regard to physical hazard classes</b>	
· <b>Explosives</b>	Void
· <b>Flammable gases</b>	Void
· <b>Aerosols</b>	Void
· <b>Oxidising gases</b>	Void
· <b>Gases under pressure</b>	Void
· <b>Flammable liquids</b>	Void
· <b>Flammable solids</b>	Void
· <b>Self-reactive substances and mixtures</b>	Void
· <b>Pyrophoric liquids</b>	Void
· <b>Pyrophoric solids</b>	Void
· <b>Self-heating substances and mixtures</b>	Void
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
· <b>Oxidising liquids</b>	Void
· <b>Oxidising solids</b>	Void
· <b>Organic peroxides</b>	Void
· <b>Corrosive to metals</b>	Void
· <b>Desensitised explosives</b>	Void

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **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:** Strong acids and bases and strong oxidizing agents
- **10.6 Hazardous decomposition products:** Carbon dioxide

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### SECTION 11: Toxicological information

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

- Acute toxicity  
Harmful if inhaled.

#### LD/LC50 values that are relevant for classification:

Oral	LD50	>10,000 mg/kg (rat)
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#### 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

Oral	LD50	>100,000 mg/kg (rat)
Dermal	LD50	>9,400 mg/kg (rabbit)
Inhalative	LC50/4 h	0.49 mg/l (rat)

#### 101-68-8 diphenylmethane-4,4'-di-isocyanate

Inhalative	LC50/4 h	490 mg/l (rat)
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- Skin corrosion/irritation**  
Causes skin irritation.
- Serious eye damage/irritation**  
Causes serious eye irritation.
- 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.
- 11.2 Information on other hazards

#### Endocrine disrupting properties

None of the ingredients is listed.

### SECTION 12: Ecological information

#### 12.1 Toxicity

#### Aquatic toxicity:

#### 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

EC 50	>100 mg/l (F2) (OECD 209 Activated Sludge, Respiration Inhibition)
	>1,000 mg/l (G) (OECD 202 Acute Immobilisation Tet)

#### 101-68-8 diphenylmethane-4,4'-di-isocyanate

EC 50	>1,000 mg/l (G) (Acute Immobilisation Test, 24h Static)
LC50	>1,000 mg/l (Brachydanio rerio (Zebraabärbling)) (OECD 203 Fish, Acute Toxicity Test, 96h static)

- 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.
- 12.5 Results of PBT and vPvB assessment**
- PBT:** Not applicable.
- vPvB:** Not applicable.
- 12.6 Endocrine disrupting properties**  
The product does not contain substances with endocrine disrupting properties.

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· **12.7 Other adverse effects**

· **Additional ecological information:**

· **General notes:**

Water hazard class (Germany) 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

### SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Must be specially treated under adherence to official regulations.

· **Uncleaned packagings:**

· **Recommendation:**

Disposal must be made according to official regulations.

Dispose of packaging according to regulations on the disposal of packagings.

### SECTION 14: Transport information

· **14.1 UN number or ID 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 Maritime transport in bulk according to IMO instruments** Not applicable.

· **UN "Model Regulation":** Void

### SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Poisons Act**

· **Regulated explosives precursors**

None of the ingredients is listed.

· **Regulated poisons**

None of the ingredients is listed.

· **Reportable explosives precursors**

None of the ingredients is listed.

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### · Reportable poisons

None of the ingredients is listed.

### · Directive 2012/18/EU

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.· **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.

EUH204 Contains isocyanates. May produce an allergic reaction.

· **Contact:** chemikalieninfo@murexin.com (+43 02622/27401)

### · 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

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

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

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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