

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.10.2016

Version number 3

Revision: 04.01.2016

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

* **1.1 Product identifier**

* Trade name **PU AW**

* Article number: 0000763000

* **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** Spacings sealent

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

* **Manufacturer/Supplier:**

Remmers GmbH
Postfach 1255
D-49624 Lönningen / Germany
Tel.: +49(0)5432/83-0
Fax: +49(0)5432/3985

Remmers (UK) Limited
Unit B1 The Fleming Centre
West Sussex RH10 9NN
fon +44 (0) 1293 594 010
fax +44 (0) 1293 594 037

* **Informing department:**

Product Safety department: Tel.: Steve Dunn Tel.: +44 (0) 1293 594 010
E-Mail: sales@remmers.co.uk

* **1.4 Emergency telephone number:**

during working hours:

U.K.: Tel.: +44 (0) 1293 594 010

sales@remmers.co.uk

Head Office Germany: Tel.: +49 (0)5432 83 187

info@remmers.de

after working hours: Tel.: +49 (0)171 21 34 091

24h-Transport Emergency Contact Phone Number:

within USA and Canada: 1-800-424-9300

outside USA and Canada: 001-703-527-3887

* **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.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

* **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Xn; Harmful

R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.

Xi; Irritant

R36: Irritating to eyes.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.10.2016

Version number 3

Revision: 04.01.2016

Trade name **PU AW**

(Contd. of page 1)

*** Classification system:**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

*** 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 GHS09

*** Signal word** Danger*** Hazard-determining components of labelling:**

Hydrocarbons, C9-unsaturated, polymerized
Diphenylmethandiisocyanat (prepolymer)
diphenylmethane-4,4'-di-isocyanate

*** 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 reaction.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

*** Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P285 In case of inadequate ventilation wear respiratory protection.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

*** Additional 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 Chemical characterisation: Mixtures**

* **Description:** permanently elastic joint sealer on a synthesis resin-polyurethane base

*** Dangerous components:**

CAS: 71302-83-5	Hydrocarbons, C9-unsaturated, polymerized	10-20%
EC number: 615-276-3	Xi R43	
Reg.nr.: 01-2119555292-40-xxxx	R52/53	
	Skin Sens. 1, H317; Aquatic Chronic 3, H412	

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.10.2016

Version number 3

Revision: 04.01.2016

Trade name PU AW

(Contd. of page 2)

CAS: 127821-00-5	aromatic polyisocyanate-prepolymer Xi R36; Xi R43 Eye Irrit. 2, H319; Skin Sens. 1, H317	10-20%
CAS: 59675-67-1	Diphenylmethandiisocyanat (prepolymer) Xn R20-48/20; Xn R42/43; Xi R36/37/38 Resp. Sens. 1, H334; 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: 38640-62-9 EINECS: 254-052-6 Reg.nr.: 01-2119565150-48	DIISOPROPYLNAPHTHALENE Xn R65; N R51/53 Asp. Tox. 1, H304; Aquatic Chronic 1, H410	2.5-5%
CAS: 14808-60-7 EINECS: 238-878-4	silica (quartz, respirable) Xn R48/20 STOT RE 1, H372	1-2.5%
CAS: 101-68-8 EINECS: 202-966-0 Index number: 615-005-00-9 Reg.nr.: 01-2119457014-47-XXXX	diphenylmethane-4,4'-di-isocyanante Xn R20; Xn R42/43; Xi R36/37/38 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	≤1.0%

* **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

* **4.1 Description of first aid measures**

* **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**

Treat affected areas of 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.

Wash immediately with water and soap and rinse thoroughly.

* **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** Allergic reactions

* **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

Foam

Fire-extinguishing powder

For larger fires also sprayed water.

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

May be released in case of fire

Carbon monoxide (CO)

Carbon dioxide (CO₂)

Nitrogen oxides (NO_x)

aromatic hydrocarbons

Isocyanate fumes

Hydrogen cyanide (HCN)

(Traces)

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.10.2016

Version number 3

Revision: 04.01.2016

Trade name **PU AW**

(Contd. of page 3)

*** 5.3 Advice for firefighters***** Protective equipment:**

Wear self-contained breathing apparatus.

Wear full protective suit.

*** Additional information** Cool endangered containers with water spray jet.*** SECTION 6: Accidental release measures***** 6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

Keep away from ignition sources

Put on breathing apparatus.

*** 6.2 Environmental precautions:**

Do not allow to enter the ground/soil.

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

Inform responsible authorities in case product reaches bodies of 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**

Use only in well ventilated areas.

Ensure good ventilation/exhaust in workplaces.

Avoid the formation of aerosols.

*** Information about protection against explosions and fires:** Keep breathing equipment ready.*** 7.2 Conditions for safe storage, including any incompatibilities***** Storage***** Requirements to be met by storerooms and containers:** No special requirements.*** Information on storage in a common storage facility:**

Suitable material for containers and pipes: Light metals and their alloys.

*** Further information about storage conditions:**

Store container in a well ventilated position.

Avoid heating above 50 °C and cooling below 0 °C.

Keep container tightly closed.

*** 7.3 Specific end use(s)** No further relevant information available.*** SECTION 8: Exposure controls/personal protection***** Additional information about design of technical systems:**

In workshops in which isocyanate aerosols and/or fumes can occur in higher concentrations, exceeding hygienic workplace limits must be prevented by deliberate air extraction. The air must be moved away from the persons.

*** 8.1 Control parameters***** Components with limit values that require monitoring at the workplace:****CAS: 101-68-8 diphenylmethane-4,4'-di-isocyanate**WEL Short-term value: 0.07 mg/m³Long-term value: 0.02 mg/m³

Sen; as -NCO

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

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.10.2016

Version number 3

Revision: 04.01.2016

Trade name **PU AW**

(Contd. of page 4)

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

Do not eat, drink or smoke while working.

Use skin protection cream for preventive skin protection.

The handling of this product is not recommended for persons with respiratory system and skin hypersensitivity (asthma, chronic bronchitis, chronic skin disease).

Keep away from food, beverages and animal feed.

Immediately remove soiled, saturated clothing.

Wash hands before pauses and after work.

Store protective clothing separately.

Avoid contact with eyes and skin.

*** Respiratory equipment:**

Not necessary if room is well-ventilated.

Short term filter device:

Filter A/P2.

In case of brief exposure or low pollution load, use respiratory protection equipment with filter. In case of intensive or longer exposure, use self-contained respiratory protection equipment.

*** Protection of hands:**

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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

*** Material of gloves**

Nitrile rubber, NBR

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**

Break through time: max. 240 min (DIN EN 374).

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 safety glasses.*** 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:** Black*** Odour:** Characteristic*** Odour threshold:** Not determined.*** pH-value:** Not determined.*** Change in condition****Melting point/Melting range:** Not determined**Boiling point/Boiling range:** Not determined*** Flash point:** Not applicable*** Inflammability (solid, gaseous)** Not applicable.*** Ignition temperature:** not applicable*** Decomposition temperature:** Not determined.*** Self-inflammability:** Product is not self-igniting.*** Danger of explosion:** Product is not explosive.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.10.2016

Version number 3

Revision: 04.01.2016

Trade name **PU AW**

(Contd. of page 5)

* Explosive Limits:	
Lower:	Not determined.
Upper:	Not determined.
* Vapour pressure at 20 °C:	< 0.00001 hPa
* Density at 20 °C	ca. 1.25 g/cm ³
* Relative density	Not determined.
* Vapour density	Not determined.
* Evaporation rate	Not determined.
* Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix
* Distribution coefficient (n-octanol/water): Not determined.	
* Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
* Solvent separation test	< 3 %
* 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 handled and stored according to specifications.
- * **10.3 Possibility of hazardous reactions**
Exothermic reaction with amines and alcohols.
With water carbon dioxide development, pressure build-up in closed containers.
Danger of bursting
- * **10.4 Conditions to avoid** No further relevant information available.
- * **10.5 Incompatible materials:**
Amines
Alcohols
- * **10.6 Hazardous decomposition products:**
None if used properly.
None if stored properly.

* SECTION 11: Toxicological information

- * **11.1 Information on toxicological effects**
- * **Acute toxicity:** Based on available data, the classification criteria are not met.
- * **LD/LC50 values that are relevant for classification:**
- ATE (Acute Toxicity Estimates)**
Inhalative LC50/4 h 78.9 mg/l
- CAS: 101-68-8 diphenylmethane-4,4'-di-isocyanate**
Oral LD50 > 15000 mg/kg (rat)
Inhalative LC50/4 h ca. 0.490 mg/l (rat)
- * **Primary irritant effect:**
- * **Skin corrosion/irritation**
Causes skin irritation.
- * **Serious eye damage/irritation**
Causes serious eye irritation.
- * **Sensitisation:**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.10.2016

Version number 3

Revision: 04.01.2016

Trade name **PU AW**

(Contd. of page 6)

* **Additional toxicological information:**

Special characteristics/effects of isocyanates:

In case of over-exposure - especially when spraying isocyanate based varnishes without protective measures - there is a danger of a concentration-dependent, irritating effect on eyes, nose, throat, and respiratory tract. The delayed appearance of symptoms and the development of hypersensitivity (trouble breathing, cough, asthma) are possible. For hypersensitive persons, reactions may be triggered by very low isocyanate concentrations, also below the TLV value. In case of prolonged contact with skin, tanning and irritating effects are possible.

* **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**

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:** No further relevant information available.* **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:*** **Remark:** Toxic for fish* **Additional ecological information:*** **General notes:**

Do not allow product to reach ground water, bodies of water or sewage system, even in small quantities.

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

Hazardous to drinking water even if extremely small quantities leak into soil.

Also toxic for fish and plankton in bodies of water.

Toxic for aquatic organisms

* **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**

Empty container, allow the product to harden.

The given refuse codes are recommendations based upon the intended use of the product. Because of special use and disposal conditions at the user's, other codes may apply under other conditions.

* **European waste catalogue**

08 04 09* waste adhesives and sealants containing organic solvents or other hazardous substances

* **Uncleaned packaging:*** **Recommendation:** Disposal must be made according to official regulations.* **SECTION 14: Transport information*** **14.1 UN-Number*** **ADR, ADN, IMDG, IATA**

Void

* **14.2 UN proper shipping name*** **ADR, ADN, IMDG, IATA**

Void

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.10.2016

Version number 3

Revision: 04.01.2016

Trade name **PU AW**

(Contd. of page 7)

* **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:** Not a hazardous good according to the above regulations.* **UN "Model Regulation":** Void* **SECTION 15: Regulatory information*** **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture*** **Directive 2012/18/EU*** **Named dangerous substances - ANNEX I** None of the ingredients is listed.* **Seveso category E2** Hazardous to the Aquatic Environment* **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t* **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t* **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 56a* **National regulations*** **Other regulations, limitations and prohibition ordinances**

From the European Committee of the Associations for varnish, printing ink and artistry paint producers - CEPE - the following information is given for isocyanate based coating materials:

Ready-to-use coating materials that contain isocyanates may have an irritating effect on mucous membranes - especially on respiratory organs - and cause hypersensitivity reactions. There is a risk of sensitization if vapours or sprayed mist are inhaled. When handling isocyanate based coating materials, all measures for solvent based coating materials must be strictly observed. Sprayed mist and vapours especially should not be inhaled.

Persons with allergies or asthma who have a tendency for respiratory tract ailments should not be allowed to work with isocyanate based coating materials.

* **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

This data is based on our present state of knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship. Delivery specifications are found in the respective Technical Information Sheets.

* **Relevant phrases**

H304 May be fatal if swallowed and enters airways.

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.

H372 Causes damage to organs through prolonged or repeated exposure.

H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

R20 Harmful by inhalation.

R36 Irritating to eyes.

R36/37/38 Irritating to eyes, respiratory system and skin.

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.10.2016

Version number 3

Revision: 04.01.2016

Trade name PU AW

(Contd. of page 8)

- R42/43 May cause sensitisation by inhalation and skin contact.
 R43 May cause sensitisation by skin contact.
 R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R65 Harmful: may cause lung damage if swallowed.

* **Department issuing data specification sheet:** Product Safety department / EHS* **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)

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

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

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

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3