

## Safety data sheet according to 453/2010/EC

Printing date 24.06.2013




Version number 3

Revision: 24.06.2013

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

- **1.1 Product identifier**
- **Trade name:** 6.20 ZWALUW PU-ROOFFIX
- **Article number:** 50105B
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation**  
Adhesives  
Glue/ Sizing agent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
DEN BRAVEN SEALANTS BV  
Denariusstraat 11  
4903 RC Oosterhout  
Netherlands  
Tel: +31 (0)162-491000  
Fax: +31 (0)162-421217  
E-mail: info@denbraven.nl  
Internet: www.denbraven.nl
- **Further information obtainable from:**  
Product safety department.  
info@denbraven.nl
- **1.4 Emergency telephone number:**  
info@denbraven.nl  
Tel.: +31 (0)162-491000

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
    -  Xn; Harmful  
R20: Harmful by inhalation.
    -  Xn; Sensitising  
R42/43: May cause sensitisation by inhalation and skin contact.
    -  Xi; Irritant  
R36/37/38: Irritating to eyes, respiratory system and skin.
  - **Information concerning particular hazards for human and environment:**  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
  - **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- 
- **2.2 Label elements**
  - **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

(Contd. on page 2)

GB



## Safety data sheet according to 453/2010/EC

Printing date 24.06.2013

Version number 3

Revision: 24.06.2013

**Trade name: 6.20 ZWALUW PU-ROOFFIX**

(Contd. of page 1)

**Code letter and hazard designation of product:**


Xn Harmful

**Hazard-determining components of labelling:**

diphenylmethanediisocyanate, isomeres and homologues

**Risk phrases:**

- 20 Harmful by inhalation.
- 36/37/38 Irritating to eyes, respiratory system and skin.
- 42/43 May cause sensitisation by inhalation and skin contact.

**Safety phrases:**

- 2 Keep out of the reach of children.
- 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
- 24 Avoid contact with skin.
- 37 Wear suitable gloves.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 63 In case of accident by inhalation: remove casualty to fresh air and keep at rest.

**Special labelling of certain preparations:**

Contains isocyanates. See information supplied by the manufacturer

**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 characterization: Mixtures**
**Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

CAS: 9016-87-9	diphenylmethanediisocyanate, isomeres and homologues Xn R20-40-48/20;  Xn R42/43;  Xi R36/37/38 Carc. Cat. 3 <hr style="border-top: 1px dashed black;"/> 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	30-60%
CAS: 77-58-7 EINECS: 201-039-8	dibutyltin dilaurate Xn R20/21/22 Muta. Cat. 3, Repr. Cat. 2 <hr style="border-top: 1px dashed black;"/> Acute Tox. 3, H301;  Acute Tox. 4, H312; Acute Tox. 4, H332	1-5%

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

### 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 to be sure call for a doctor.

(Contd. on page 3)



## Safety data sheet according to 453/2010/EC

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Version number 3

Revision: 24.06.2013

**Trade name: 6.20 ZWALUW PU-ROOFFIX**

(Contd. of page 2)

- In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **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**  
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 extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation
- **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).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections** See Section 8 for information on personal protection equipment.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **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:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage 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.

(Contd. on page 4)

GB



## Safety data sheet according to 453/2010/EC

Printing date 24.06.2013

Version number 3

Revision: 24.06.2013

Trade name: 6.20 ZWALUW PU-ROOFFIX

(Contd. of page 3)

### · 8.1 Control parameters

#### · Ingredients with limit values that require monitoring at the workplace:

##### 9016-87-9 diphenylmethanediisocyanate, isomers and homologues (30-60%)

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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##### 77-58-7 dibutyltin dilaurate (1-5%)

WEL	Short-term value: 0.2 mg/m <sup>3</sup> Long-term value: 0.1 mg/m <sup>3</sup> as Sn; Sk
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· **Additional information:** The lists valid during the making were used as basis.

### · 8.2 Exposure controls

#### · Personal protective equipment:

#### · General protective and hygienic measures:

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- 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.

#### · 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

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:



Tightly sealed goggles

## SECTION 9: Physical and chemical properties

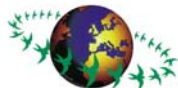
### · 9.1 Information on basic physical and chemical properties

#### · General Information

#### · Appearance:

<b>Form:</b>	Fluid
<b>Colour:</b>	Red

(Contd. on page 5)



## Safety data sheet according to 453/2010/EC

Printing date 24.06.2013

Version number 3

Revision: 24.06.2013

**Trade name: 6.20 ZWALUW PU-ROOFFIX**

(Contd. of page 4)

· <b>Odour:</b>	Characteristic
· <b>pH-value:</b>	Undetermined.
· <b>Change in condition</b> <b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	> 180 °C
· <b>Flash point:</b>	> 100 °C
· <b>Ignition temperature:</b>	400 °C
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b> <b>Lower:</b>	Undetermined.
<b>Upper:</b>	Undetermined.
· <b>Vapour pressure:</b>	Undetermined.
· <b>Density at 20 °C:</b>	1.12 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Solvent content:</b> <b>VOC (EC)</b>	0.00 %
· <b>9.2 Other information</b>	No further relevant information available.

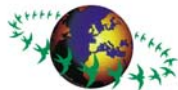
### SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **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:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:**  
Sensitization possible through inhalation.  
Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful

(Contd. on page 6)



## Safety data sheet according to 453/2010/EC

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Version number 3

Revision: 24.06.2013

<b>Trade name: 6.20 ZWALUW PU-ROOFFIX</b>
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Irritant

(Contd. of page 5)


### 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.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
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

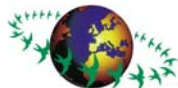
- **13.1 Waste treatment methods**
  - **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
  - **European waste catalogue**
- |          |  |
|----------|--|
| 08 04 09 | waste adhesives and sealants containing organic solvents or other dangerous substances |
|----------|--|
- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- **14.1 UN-Number**
  - **ADR, ADN, IATA** Void
  - **IMDG** 3082
  - **14.2 UN proper shipping name**
  - **ADR, ADN, IATA** Void
  - **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dibutyltin dilaurate)
  - **14.3 Transport hazard class(es)**
  - **ADR, ADN, IATA**
  - **Class** Void
  - **IMDG**
- |   |   |
|---|---|
|  | <ul style="list-style-type: none"> <li>· <b>Class</b> 9 Miscellaneous dangerous substances and articles.</li> <li>· <b>Label</b> 9</li> </ul> |
|---|---|

(Contd. on page 7)

GB



## Safety data sheet according to 453/2010/EC

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Version number 3

Revision: 24.06.2013

**Trade name: 6.20 ZWALUW PU-ROOFFIX**

(Contd. of page 6)

· <b>14.4 Packing group</b>	
· <b>ADR, IATA</b>	Void
· <b>IMDG</b>	III
· <b>14.5 Environmental hazards:</b>	
· <b>Marine pollutant:</b>	Yes Symbol (fish and tree)
· <b>14.6 Special precautions for user</b>	Not applicable.
· <b>EMS Number:</b>	F-A,S-F
· <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.

### SECTION 15: Regulatory information

- **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**

- H301 Toxic if swallowed.
- H312 Harmful in contact with skin.
- 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.
- R20 Harmful by inhalation.
- R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R40 Limited evidence of a carcinogenic effect.
- R42/43 May cause sensitisation by inhalation and skin contact.
- R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

- **Department issuing MSDS:** Product safety department.

- **Contact:** Mr. C.J.A. Timmermans

- **\* Data compared to the previous version altered.**