Den Braven Sealants by

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SAFETY DATA SHEET



 Reference
 : 4.20

 Grade
 : 420

 Date
 : 17-10-2002

 Replaces
 : previous sheet

Zwaluw Polyurethane-15 LM

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name : Zwaluw Polyurethane-15 LM
Use of the product : Sealant for the building industry.

Supplier : See above

Emergency phone number : +31 (0) 413-268716 if no answer +31 (0) 161-451909 (after working hours)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization : Mixture based on polyurethane prepolymer.

| Hazardous ingredients = 1% : and toxic ingredients = 0,1% | <u>CAS</u> <u>Number</u> | <u>Einecs</u> <u>Number</u> | Weight 9/6 | Danger Symbol | <u>Risk</u> <u>Phrases</u> |
|-----------------------------------------------------------|-----------------------------|--------------------------------|------------|------------------|-------------------------------|
| Calcium oxide | 1305-78-8 | 215-138-9 | 1-2,5 | Xi | 37/38-41 |
| Solvent naphtha (petroleum), light aromatic | 64742-95-6 | 265-199-0 | 2,5-10 | Xn, N | 10-37-51/53-65-66 |
| Diphenylmethane-4,4'-di-isocyanate (MDI) | 101-68-8 | 202-966-0 | <1 | Xn | 20-36/37/38-42/43 |

3. HAZARDS INDENTIFICATION

Potential health effects : May cause sensitisation by inhalation.

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

4. FIRST AID MEASURES

Eyes: In case of contact flush eyes immediately with plenty of water for at least 15 minutes.

Lift eyelids and rinse well underneath them. Get medical attention if irritation persists.

Mouth (ingestion) : Rinse mouth with water several times. Consult a physician and show this Safety Data Sheet.

Lungs (inhalation) : Fresh air and rest. Get medical attention if complaint persists.

Skin : Remove completely with a dry cloth or paper towel, before washing with detergent and water.

Get medical attention if irritation persists.

Clothes : Remove polluted clothing.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : CO₂, powder, foam and water spray.

Unsuitable extinguishing media : Unknown.

Special fire fighting procedures : Wear protective clothing and breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions: Keep away from drains and watercourses.

Clean up procedures : Wipe, scrape or soak up in inert material and put in a container for disposal.

Personal precautions : Wear proper protective equipment as described in the 'eye and skin protection' section of chapter 8.

7. HANDLING AND STORAGE

Handling : Handle in well-ventilated area. Avoid contact with skin, eyes and do not swallow.

Storage : Store in closed packing between 5°C and 25°C away from direct sunlight and other sources of heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit : MAC-TGG (8h) Solvent naphtha (petroleum), light aromatic: 50 ppm

Diphenylmethane-4,4'-di-isocyanate (MDI): 0,01 ppm

Respiratory protection: Avoid breathing the vapour. Maintain good ventilation.Eye and skin protection: Avoid contact with skin and eyes. Wear safety glasses.

Industrial hygiene : When using do not eat, drink or smoke. Wash hands after work and before breaks.

Don't rub eyes with dirty hands.

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9. PHYSICAL AND CHEMICAL PROPERTIES

>55 Physical state Flash point $^{\circ}C$ paste Colour miscellaneous Lower explosion limit Unk vol-% Odour hydrocarbon Upper explosion limit Unk vol-% °C Density (water=1) 1,15-1,19 Unk g/ml **Ignition temperature** : pH (water=7) Unk Vapour pressure Unk mbar

°C **Boiling point (water = 100)** Unk Mixable with water no

Freezing point (water = 0) : Unk °C Mixable with organic solvents partly

Weight-% VOC-content 7-8

10. STABILITY AND REACTIVITY

In case of fire: isocyanate, CO, CO₂, NO_x, HCl, HCN, SO₂. Hazardous decomposition products :

Materials to avoid Unknown. Conditions to avoid Unknown.

11. TOXICOLOGICAL INFORMATION

Product information Diphenylmethane-4,4'-di-isocyanate

Acute oral LD50 (mg/kg) >15000 Acute dermal LD50 (mg/kg) unknown Acute inhalation LC50 (mg/l) 0,49 Other information Unknown.

For information on hazardous substances see 'chapter' 2.

12. ECOLOGICAL INFORMATION

Avoid uncured product will come in the environment.

Degradability

Ecotoxicity Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

WGK (Germany) : Unknown.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with federal, state and local legislation.

Waste code (Germany) : 080409

14. TRANSPORT INFORMATION

By sea according IMDG-Code Not applicable. By land according ADR Not applicable. By air according ICAO/IATA-DGR Not applicable. **UN-number** Not applicable. Proper shipping name Not applicable.

15. REGULATORY INFORMATION

To the labelling requirements of EC Directives 67/548/EC and 1999/45/EC:

Danger symbol : Xn Harmful

Diphenylmethane-4,4'-di-isocyanate Contains

42 R-phrases May cause sensitisation by inhalation. :

> 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases 2 Keep out of reach of children.

23 Do not breathe vapour.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where

46 If swallowed, seek medical advice immediately and show this container or label. 63 In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Contains isocyanates. See information supplied by the manufacturer.

Extra For DIY user Tactile warning applicable.

16. OTHER INFORMATION

This product safety data sheet conforms to EC Directive 91/155/EEC as well as its amendments including 2001/58/EC.

This data is offered in good faith as typical values and not as product specifications. No warranty either expressed or implied, is hereby made. The recommended industrial and safe handling procedures are believed to be generally applicable, each user should review the recommendations in the specific context of the intended use and determine whether they are appropriate.

NA : Not Applicable Unk : Unknown