

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 09.07.2009

Revision: 09.07.2009

1 Identification of substance:

- **Product details:**
- **Trade name:** UNOBOND
- **Article number:** UNOBOND-300
- **Application of the substance / the preparation :** Adhesive
- **Manufacturer/Supplier:**
ADHESEAL PTY LTD
2/8 HARVTON ST
STAFFORD
QLD 4053
AUSTRALIA
Phone: 61 (07) 3356 0000
Fax : 61 (07) 3356 0005
Internet : <http://www.adheseal.com.au>
- **E-mail address of the competent person responsible for the safety data sheet :**
mal@adheseal.com.au
- **Information department:** Laboratory

2 Hazards identification

- **Hazard description:**



Xn Harmful

- **Information pertaining to particular dangers for man and environment**

R 20 Harmful by inhalation.

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 40 Limited evidence of a carcinogenic effect.

R 42/43 May cause sensitisation by inhalation and skin contact.

R 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Contains isocyanates. See information supplied by the manufacturer.

- **Classification system**

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

3 Composition/information on ingredients

- **Chemical characterization**

- **Description:**

Adhesive containing a polyurethane prepolymer based on diphenylmethanediisocyanate

- **Dangerous components:**

CAS: 26447-40-5

methylenediphenyl diisocyanate

20-30%

EINECS: 247-714-0

☒ Xn, ☒ Xi; R 36/37/38-40-42/43-48/20

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

4 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.

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- **After eye contact**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Do not induce vomiting; call for medical help immediately.
- **The following symptoms may occur:**
 - Nausea
 - Headache
 - Dizziness
 - Coughing
 - Breathing difficulty

5 Fire fighting measures

- **Suitable extinguishing agents** CO₂, extinguishing powder or water spray.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Special hazards caused by the material, its products of combustion or resulting gases:**
In case of fire, the following can be released:
Carbon monoxide (CO)
Nitrogen oxides (NO_x)
In certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:
Hydrogen cyanide (HCN)
Isocyanates
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:**
Particular danger of slipping on leaked/spilled product.
Ensure adequate ventilation.
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
- **Measures for cleaning/collecting:**
Pick up mechanically.
Send for recovery or disposal in suitable receptacles.
Do not close them (reaction with water forming carbon dioxide).

7 Handling and storage

- **Handling**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Store only in unopened original receptacles.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in dry conditions.
Store in a cool place.

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8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**

· **Additional Occupational Exposure Limit Values for possible hazards during processing:**

101-68-8 diphenylmethane-4,4'-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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- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
Avoid contact with the eyes and skin.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Do not eat, drink, smoke while working.
- **Breathing equipment:**
Use suitable respiratory protective device in case of insufficient ventilation:
Filter AB
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
Short term filter device:
- **Protection of hands:**
PVA, natural, butyl, nitrile or polychloroprene rubber gloves of superior quality.
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.
- **Eye protection:** Tightly sealed goggles.
- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

· General Information

Form:	Highly viscous
Colour:	Cream coloured
Odour:	Light

· Change in condition

Melting point/Melting range:	undetermined
Boiling point/Boiling range:	> 200°C

· **Flash point:** Not applicable

· **Self-ignition temperature:** > 200°C

· **Decomposition temperature:** > 140°C

· **Self igniting:** Product is not selfigniting at room temperature.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20°C:** 1.05

· **Solubility in / Miscibility with Water:** Insoluble

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· **Viscosity:**
 dynamic at 20°C: 400 000 mPa.s

· **Solvent content:**
 Organic solvents: 0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
 No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions:**
 Reacts with alcohols, amines, aqueous acids and alkalis.
 Reacts with water forming carbon dioxide. Danger of receptacles bursting because of vapour overpressure.
- **Dangerous products of decomposition:** None to our knowledge at room temperature.

11 Toxicological information

- **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.
- **Sensitisation** May cause sensitisation by inhalation and skin contact.

12 Ecological information:

- **General notes:**
 Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
 Do not allow product to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
- **Recommendation**
 Must be disposed of in an incinerator for hazardous waste according to official regulations.
- **Waste disposal key:** 08 04 11*
- **Uncleaned packagings:**
- **Recommendation:**
 Disposal must be made according to official regulations.
 The packagings may be decontaminated for example with the following mixture : water + 5 to 10 % sodium carbonate + 0.2 to 1 % liquid detergent. Add this mixture to the residues in the unclosed container in order to allow carbon dioxide to escape. Let react during several days until no reaction occurs.

14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -

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· **Remarks:** Not hazardous

· **Maritime transport IMDG:**

· **IMDG Class:** -

· **Marine pollutant:** No

· **Remarks:** Not hazardous

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** -

· **Proper shipping name:** Not regulated

· **Remarks:** Not hazardous.

15 Regulations

· **Markings according to EU guidelines:**

The product has been classified and marked in accordance with EU directives.

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



Xn Harmful

· **Hazard-determining components of labelling:**

methylenediphenyl diisocyanate

· **Risk phrases:**

20 Harmful by inhalation.

36/37/38 Irritating to eyes, respiratory system and skin.

40 Limited evidence of a carcinogenic effect.

42/43 May cause sensitisation by inhalation and skin contact.

48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

· **Safety phrases:**

23 Do not breathe vapour.

36/37 Wear suitable protective clothing and gloves.

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

· **Safety phrases in case of sale to the general public :**

2 Keep out of the reach of children.

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.

· **Special labelling of certain preparations:**

Contains isocyanates. See information supplied by the manufacturer.

· **Advised phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 28 After contact with skin, wash immediately with plenty of soap and water.

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.

This data sheet is particularly in accordance with the European directives 1999/45/EC and 2001/59/EC ; it is written according to the European regulation 1907/2006/EC (annex II).

· **Relevant R-phrases**

36/37/38 Irritating to eyes, respiratory system and skin.

40 Limited evidence of a carcinogenic effect.

42/43 May cause sensitisation by inhalation and skin contact.

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48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

- **Department issuing MSDS:** Laboratory
- **Contact:** Mr. JOHNSON
- **In accordance with the international standard :**
ISO 11014-1

An asterisk in the margin of a paragraph means amendments in comparison to the former version.

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