

## Material Safety Data Sheet PU Adhesive for Roofing Membranes

### 1. Identification of the Preparation and Company

#### 1.1 Chemical Product - PU Adhesive for Roofing Membranes

#### 1.2 Application- Construction Adhesive

#### 1.3 Company Identification

Marley Waterproofing  
Covert Road  
Aylesham Industrial Estate  
Aylesham  
Kent CT3 3EQ

#### 1.4 Telephone Number - 01304 843300

### 2. Composition/Information on Ingredients

#### 2.1 Chemical Description

Polyurethane based adhesive in flammable solvents.

#### 2.2 Hazardous Ingredients

Chemical	4-4'-methylenediphenyl diisocyanate
Risk Phrases	R20-36/37/38-42/43
EINECS No.	202-966-0
CAS No.	101-68-8
% Weight	2.5-10

Chemical	Cyclohexane
Risk Phrases	R11-38-50/53-65-67
EINECS No.	203-806-2
CAS No.	110-82-7
% Weight	2.5-10

Chemical	Ethyl Acetate
Risk Phrases	R11-36-66-67
EINECS No.	205-500-4
CAS No.	141-78-6
% Weight	2.5-10

Chemical	Methyl Acetate
Risk Phrases	R11-36-66-67
EINECS No.	201-185-2
CAS No.	79-20-9
% Weight	2.5-10

Chemical	Tris(nonylphenol)phosphite (TNPP)
Risk Phrases	R38-43-50/53
% Weight	≤2.5

See Section 16 for full Risk Phrases.

### 3. Hazards Identification of the Preparation

Highly Flammable  
Irritating to eyes, respiratory system and skin  
May cause sensitisation by inhalation and skin contact  
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Vapours may cause drowsiness and dizziness.

### 4. First Aid Measures

#### 4.1 Eye Contact

Irrigate immediately with clean water for at least 10 minutes and obtain immediate medical attention.

#### 4.2 Skin Contact

Thoroughly wash the affected area with soap and water. Do not use solvents to clean skin. Medical advice should be obtained if skin trouble develops.

#### 4.3 Ingestion

Obtain medical attention immediately and show the product label if possible. Rinse mouth out with water. Do not induce vomiting.

#### 4.4 Inhalation

Remove from exposure into the open air. Obtain medical attention.

### 5. Fire Fighting

#### 5.1 Extinguisher Media

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

#### 5.2 Protective Measures

Wear respiratory equipment (compressed air, compressed air suit) and protective clothing.

### 6. Accidental Release Measures

#### 6.1 Personal Precautions

When cleaning spillage wear protective clothing, a mask, gloves and goggles. Avoid contact with the skin. Provide proper ventilation or wear respiratory equipment.

#### 6.2 Environmental Precautions

Contain the spill using sand or earth, so as to prevent the contamination of a watercourse, land or the drains.

#### 6.3 Cleaning up

Treat spillage with a mineral absorbent or sand and remove to a safe place until the waste can be removed from the site by a licensed contractor. Dispose of as hazardous waste.

## 7. Handling and Storage

### 7.1 Storage

Store at room temperature and in a dry area. Keep away from food and drink.

### 7.2 Handling

Use only in well ventilated areas, i.e. the open air. Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and goggles.

## 8. Exposure Controls/Personal Protection

### 8.1 Occupational Exposure Limits

Chemical	4-4'-methylenediphenyl diisocyanate
MEL 8hr	0.02 mg m <sup>-3</sup>
MEL 15 min	0.07 mg m <sup>-3</sup>
Reference	EH40

Chemical	Cyclohexane
OES 8hr	350 mg m <sup>-3</sup> (100ppm)
OES 15 min	1050 mg m <sup>-3</sup> (300ppm)
Reference	EH40

Chemical	Ethyl Acetate
OES 8hr	200ppm
OES 15 min	400ppm
Reference	EH40

Chemical	Methyl Acetate
OES 8hr	616 mg m <sup>-3</sup> (200ppm)
OES 15 min	770 mg m <sup>-3</sup> (250ppm)
Reference	EH40

MEL – Maximum Exposure Limit

OES – Occupational Exposure Standard

Based on information valid at time of writing.

### 8.2 Personal Protection

Self-contained breathing apparatus may be required if working in enclosed spaces. Wear impervious gloves (e.g. of neoprene or nitrile rubber), safety goggles, long sleeved overalls and enclosed footwear.

## 9. Physical and Chemical Properties

Appearance	Yellow, viscous liquid
Odour	Organic solvent
Boiling Point	Not determined
Flash Point	<0°C
Ignition Temperature	260°C
Specific Gravity	1.00 g/cm <sup>3</sup> @ 20°C
Viscosity at 20°C	6000 mPas
% Volatile	17%

## 10. Stability and Reactivity

**10.1 Stability** – Stable under normal conditions, product foams on contact with moisture.

**10.2 Materials to Avoid** – Water, causes foaming of the product and generation of carbon dioxide. Exothermic reaction with amines and alcohols.

**10.3 Conditions to Avoid** – Open fire and other heat sources

## 11. Toxicological Information

### 11.1 Short Term Effects

**Eye** Eye contact will cause irritation.

**Skin** This product may degrease the skin and cause irritation, and in some cases dermatitis.

**Ingestion** There is no specific effect.

**Inhalation** The inhalation of vapours may cause nausea, headaches, dizziness and sensitisation.

### 11.2 Chronic Effects

This product is classified as a sensitizer by inhalation and in contact with the skin. Sensitisation is a chronic effect in that once sensitised future contact with small amounts of the product may cause an allergic reaction.

## 12. Ecological Information

Toxic for fish and aquatic organisms. This product is not degradable. Forms a hardened layer of foamed adhesive in water. Danger to drinking water even if a small quantity leaks into the ground.

## 13. Disposal Considerations

This material and container must be disposed of as hazardous waste. Do not empty into drains. Dispose of in accordance with local and national regulations.

European Waste Catalogue: 08 04 09 waste adhesives and sealants containing organic solvents or other dangerous substances.

## 14. Transport Information

**Land Transport ADR/RID (cross-border):** ADR/RID Class 3 Flammable Liquids; Danger Code (Kemler) 30; UN-Number 1133; Packaging Group III; Hazard Label 3; Description of goods 113 ADHESIVES

**Maritime Transport IMDG:** IMDG Class 3; UN Number 1133; Label 3; Packaging Group III; EMS Number F-E, S-D; Proper Shipping Name ADHESIVES.

**Air Transport ICAO-TI and ITATA-DGR:** ICAO/IATA Class 3; UN/ID Number 1133; Label 3; Packaging Group III; Proper Shipping Name ADHESIVES.

## 15. Regulatory Information

Label for Supply



Harmful



Dangerous  
for the  
environment



Highly  
Flammable

Contains 4,4'-methylenediphenyl diisocyanate

Contains isocyanates. See information supplied by the manufacturer

Risk Phrases:

R11 Highly flammable

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

R42/43 May cause sensitisation by inhalation and skin contact

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67 Vapours may cause drowsiness and dizziness

Safety Phrases:

S9 Keep container in a well ventilated place.

S23 Do not breathe vapour.

S37 Wear suitable gloves.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S57 Use appropriate container to avoid environmental contamination.

## 16. Other Information

### Full Text of Risk Phrases in Section 2

R11 Highly flammable

R20 Harmful by inhalation

R36 Irritating to eyes

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

R38 Irritating to skin

R42/43 May cause sensitisation by inhalation and skin contact

R43 May cause sensitisation by skin contact

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R65 Harmful: may cause lung damage if swallowed

R66 Repeated exposure may cause skin dryness and cracking

R67 Vapours may cause drowsiness and dizziness

This data sheet and advice given only when the product is used for the stated application according to the directions for use. Use for other applications may give rise to risks not covered by this data sheet.

If you have purchased this product for use by a third party it is a requirement that you make the information available to that person and that you ensure that the spirit and intention of the recommendations are implemented.

This data sheet does not constitute a users assessment as required by regulation 6 of the COSHH Regulations.

**Date: October 2004 – Issue 1**