



# Material Safety Data Sheet

Page 1 of 8

Issue date: March 2010

PR-1167

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** PR-1167

**Synonym:** None

**Use:** Polyurethane Primer

**Era Polymers Pty Ltd**  
**25-27 Green Street**  
**East Botany NSW 2019**  
**Australia**  
**Ph: +61 2 9666 3788**  
**Fax: +61 2 9666 4805**

**Emergency Advice All Hours:**  
Technical Manager +61 2 9666 3788

## 2. HAZARDS IDENTIFICATION

HAZARDOUS ACCORDING TO NOHSC CRITERIA

**Hazard Category:** Toxic (T), Irritant (Xi)

**Hazard Classification:** HAZARDOUS SUBSTANCE, DANGEROUS GOOD

### RISK PHRASES

R10 Flammable  
R20 Harmful by inhalation.  
R36/37/38 Irritating to eyes, respiratory system and skin.  
R42/43 May cause sensitisation by inhalation and skin contact.  
R45 May cause cancer.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R65 Harmful: May cause lung damage if swallowed.

### SAFETY PHRASES

S23 Do not breathe vapour.  
S26 In case of contact with eyes, rinse immediately with plenty of water and contact a doctor.  
S36/37 Wear suitable protective clothing and gloves.  
S38 In case of insufficient ventilation, wear suitable respiratory protection.  
S45 In case of accident or if you feel unwell, contact a doctor immediately and show this container or label.  
S53 Avoid exposure - obtain special instructions before use.  
S61 Avoid release to the environment. Refer to special instructions/safety data sheet.

**Poison Schedule:** S6 [Aust]

This material is a Scheduled **S6** Poison and must be stored, handled and used according to the appropriate regulations.

### Warning Statement:

Do not swallow. Avoid breathing vapours. Avoid skin and eye contact. Breathing vapours may produce asthma-like symptoms. Skin contact may cause allergic reaction. Avoid release into the aquatic environment. May cause cancer. Flammable.



# Material Safety Data Sheet

Page 2 of 8

Issue date: March 2010

PR-1167

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
XYLENE (Below Cut-off)	10 to 30%	1330-20-7
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.	10 to 30%	64742-95-6
METHYLENEDIPHENYL DIISOCYANATE [MDI]	10 to 30%	101-68-8
1,2,4-TRIMETHYLBENZENE (Below Cut-off)	1 to 10%	95-63-6
1,1'-METHYLENEBIS(ISOCYANATOBENZENE) [MDI]	1 to 10%	26447-40-5

All other ingredients not hazardous according to NOHSC Criteria.

## 4. FIRST AID MEASURES

### Swallowed:

If swallowed, DO NOT induce vomiting. Seek urgent medical attention.

### Eye:

If material is splashed into eyes, flush with plenty of water for at least 15 minutes, ensuring eyelids are held open. Seek medical attention if symptoms persist.

### Skin:

If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with water and soap. Seek medical attention. Do not reuse contaminated clothing without laundering.

### Inhaled:

Remove victim to fresh air. Apply resuscitation if victim is not breathing. Administer oxygen if breathing is difficult. Seek medical attention immediately.

### First Aid Facilities:

Eye wash fountain, safety shower and normal washroom facilities.

### Advice to Doctor:

Treat symptomatically.

### In case of poisoning, contact Poisons Information Centre

In Australia call Tel: 131126

In New Zealand Tel: 034747000

## 5. FIRE-FIGHTING MEASURES

### Fire/Explosion Hazard

EXTINGUISHING MEDIA: Use water spray, alcohol foam, carbon dioxide or dry chemical to extinguish fires. If water spray or alcohol is used it should be in large quantities.

SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus (SCBA) required for fire-fighting personnel. Wear full fire fighting protective clothing. If possible to do so safely, shut off fuel to fire. Use water spray to spray to cool fire-exposed surfaces and to protect personnel.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapours from this product may travel or be moved by air currents and be ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge or other ignition sources at locations distant from the point of handling. Water or alcohol foam may react violently with hot isocyanate releasing carbon dioxide. Do not reseal contaminated containers since pressure build-up may cause rupture. Keep containers cool by spraying with water if exposed to fire.

HAZCHEM CODE: 3[Y] [Aust]

### FLAMMABILITY

Flammable liquid. Avoid all sources of ignition, heat and naked flames. Vapours may travel a considerable distance to source of ignition and ignite.



# Material Safety Data Sheet

Page 3 of 8

Issue date: March 2010

PR-1167

## 6. ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS:

Where exposure level is known, wear approved respirator suitable for level of exposure. Where exposure level is not known, wear approved positive pressure self-contained respirator. In addition to the protective clothing/equipment in Section 8 (Exposure Controls / Personal Protection) of this MSDS, wear impermeable boots.

### METHODS FOR CLEANING UP:

Remove sources of ignition. Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

### ENVIRONMENTAL PRECAUTIONS:

Use appropriate containment to avoid environmental contamination.

## 7. HANDLING AND STORAGE

### HANDLING:

Containers must be bonded and grounded when pouring or transferring material.

### STORAGE:

Areas containing this material should have fire safe practices and electrical equipment in accordance with applicable regulations and/or guidelines. Standards are primarily based on the material's flashpoint, but may also take into account properties such as miscibility with water or toxicity. All local and national regulations should be followed. In Australia, follow AS1940 - The Storage and Handling of Flammable and Combustible Liquids.

Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition, strong alkalis, acids, oxidising agents and combustibles. Store in original packaging as approved by manufacturer. Keep material away from moisture.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Standards

No exposure standards are available for this product, however, the following exposure standards have been assigned by [NOHSC] to the following components of the product:

#### *XYLENE (Below Cut-off)*

(Worksafe Australia)

[TWA] 80 ppm      350 mg/m<sup>3</sup>

[STEL] 150 ppm      655 mg/m<sup>3</sup>

References: A;R

(ACGIH)

[TWA] 100 ppm      434 mg/m<sup>3</sup>

[STEL] 150 ppm      651 mg/m<sup>3</sup>

Carcinogen Category: A4

Notices: BEI

#### *SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.*

(Worksafe Australia)

[TWA] 50 ppm

#### *METHYLENEDIPHENYL DIISOCYANATE [MDI]*

Isocyanate exposure standards (Worksafe Australia)

[TWA] 0.02 mg/m<sup>3</sup>

[STEL] 0.07 mg/m<sup>3</sup>

Notices: Sen

(ACGIH)

[TWA] 0.005 ppm      0.051 mg/m<sup>3</sup>



# Material Safety Data Sheet

Page 4 of 8

Issue date: March 2010

## PR-1167

### *1,2,4-TRIMETHYLBENZENE (Below Cut-off)*

No exposure standards have been assigned by the National Occupational Health & Safety Commission (NOHSC)

### *1,1'-METHYLENEBIS(ISOCYANATOBENZENE) [MDI]*

Isocyanate exposure standards (Worksafe Australia)

[TWA] 0.02 mg/m<sup>3</sup>

[STEL] 0.07 mg/m<sup>3</sup>

Notices: Sen

(ACGIH)

[TWA] 0.005 ppm      0.051 mg/m<sup>3</sup>

### Engineering Controls

Flammable liquid. Maintain adequate ventilation at all times. Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure. Prevent accumulation of vapours in hollows or sumps. Eliminate any sources of ignition. Elevated temperature or mechanical action may form vapours, mists or fumes, which may require local exhaust ventilation systems.

### Personal Protection Equipment

CLOTHING: Wear suitable protective clothing to prevent skin contact.

GLOVES: Wear impermeable gloves to prevent skin contact.

EYES: Wear eye/face protection such as chemical splash-proof goggles or face shield. Eyewash equipment and safety shower should be provided in areas of potential exposure.

RESPIRATORY PROTECTION: Avoid breathing of vapours/gases. Select and use respirators in accordance with AS/NZS 1715/1716. When gases exceed the exposure standards then the use of a half-face respirator with organic vapour cartridge is recommended. For high concentrations use an atmosphere-supplied, positive pressure demand self-contained or airline breathing apparatus, complying with the requirements of AS/NZS 1715 is recommended. Filter capacity and respirator type depends on exposure levels and type of contaminant. If entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply complying with AS/NZS 1715 / 1716, or any other acceptable International Standard is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Brown liquid
<b>Boiling Point Melting Point:</b>	Not determined
<b>Vapour Pressure:</b>	Not determined
<b>Specific Gravity:</b>	1.01
<b>Flash Point:</b>	27°C (closed cup)
<b>Flammability Limits:</b>	Not determined
<b>Solubility in Water:</b>	Negligible

### Other Properties

Not determined.

## 10. STABILITY AND REACTIVITY

### STABILITY:

Stable under normal conditions of use.

### HAZARDOUS DECOMPOSITION PRODUCTS:

Emits oxides of carbon and nitrogen when heated to decomposition.

### HAZARDOUS POLYMERIZATION:

May occur. Do not heat above 204.4°C (400°F).



# Material Safety Data Sheet

Page 5 of 8

Issue date: March 2010

PR-1167

## INCOMPATIBILITIES:

Avoid acids, bases, strong amines, oxidising agents and water. Can react with water to build up pressure in closed containers.

## CONDITIONS TO AVOID:

Heat, flames, ignition sources, moisture and incompatibles.

## 11. TOXICOLOGICAL INFORMATION

No adverse health effects are expected, if the product is handled in accordance with this Material Safety Data Sheet and the product label. Symptoms and effects that may arise if the product is mishandled and overexposure occurs are:

### ACUTE HEALTH EFFECTS:

#### Swallowed:

Toxic if swallowed.

Vomiting may cause this product to be aspirated into the lungs, which may lead to chemical pneumonitis.

#### Eye:

Will cause irritation to the eyes, with effects including: tearing, pain, stinging and blurred vision. Depending upon duration of exposure, eye damage may occur.

#### Skin:

Toxic by skin contact.

Will cause irritation to the skin, with effects including: redness, itchiness, and possible dermatitis.

#### Inhaled:

Toxic if inhaled.

Will cause irritation to the nose, throat and respiratory system with effects including: dizziness, headache, coughing, loss of co-ordination and chest pains.

#### Chronic:

Prolonged or repeated skin contact may lead to dermatitis.

Prolonged contact may cause severe eye irritation and some form of permanent eye damage may occur.

Prolonged or repeated exposure may lead to cancer.

Prolonged or repeated exposure may lead to irreversible damage to health.

Prolonged or repeated exposure or deliberately concentrating and inhaling the vapour(s) may result in lung function incapacity or death.

Prolonged or repeated contact with this substance will cause sensitisation by inhalation.

Prolonged or repeated contact with this substance will cause sensitisation by skin contact.

### Toxicological Data:

#### ACUTE TOXICITY DATA:

Oral: LD50 (rat) > 5000 mg/kg

Dermal: LD50 (rabbit) = no data

Inhalation: LC50 (rat, 4 hour) = 1.6 mg/L

#### LOCAL EFFECTS ON SKIN AND EYE:

Dermal: irritating

Eye: irritating

#### ALLERGIC SENSITISATION:

Dermal: sensitising

Inhalation: sensitising

#### GENOTOXICITY:

Ames Salmonella Assay: no data



# Material Safety Data Sheet

Page 6 of 8

Issue date: March 2010

## PR-1167

### Toxicological Data for Ingredient(s):

#### ACUTE TOXICITY DATA:

(1) Xylene

Oral: LD50 (rat) = 4300 - 5000 mg/kg

Inhalation: LC50 (rat, 4 hour) = 19.7 - 29.1 mg/L

(2) Solvent Naphtha (Petroleum), Light Arom.

Oral: LD50 (rat) = 4.5 - 25 mL/kg

Inhalation: LC50 (rat) = 15000 ppm

(3) Methylenediphenyl Diisocyanate [MDI]

Oral: LD50 (rat) > 15800 mg/kg

Dermal: LD50 (rabbit) > 7900 mg/kg

Inhalation: LC50 (rat, 2 hour) > 0.40 mg/L

(4) 1,2,4-Trimethylbenzene

Oral: LD50 (rat) > 8.0 mg/kg

Inhalation: LC50 (rat) = 10.2 mg/L

#### LOCAL EFFECTS ON SKIN AND EYE:

(1) Xylene

Dermal: irritating

Eye: no data

(2) Solvent Naphtha (Petroleum), Light Arom.

Dermal: irritating

Eye: not irritating

(3) Methylenediphenyl Diisocyanate [MDI]

Dermal: irritating

Eye: irritating

(4) 1,2,4-Trimethylbenzene

Dermal: irritating

Eye: not irritating

(5) 1,1'-Methylenebis(isocyanatobenzene) [MDI]

Dermal: irritating

Eye: irritating

#### ALLERGIC SENSITISATION:

(1) Methylenediphenyl Diisocyanate [MDI]

Dermal: sensitising

(2) 1,1'-Methylenebis(isocyanatobenzene) [MDI]

Dermal: sensitising

Inhalation: sensitising

#### GENOTOXICITY:

(1) Methylenediphenyl Diisocyanate [MDI]

Ames Salmonella Assay: mutagenic

Mouse Micronucleus Assay: not mutagenic

#### OTHER INFORMATION:

(1) Methylenediphenyl Diisocyanate [MDI]

May cause lung damage

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

There is no information available for this substance.

### Mobility:

There is no information available for this substance.



# Material Safety Data Sheet

Page 7 of 8

Issue date: March 2010

PR-1167

**Persistence / Degradability:**

There is no information available for this substance.

**Chemical Fate Information:**

This substance is Toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. This substance may cause long-term adverse effects in the environment.

The ecological assessment for this material is based on an evaluation of its components.

## 13. DISPOSAL CONSIDERATIONS

Recycling, recovery and reuse of material is encouraged where permitted. If disposal is necessary, it is recommended that the material be disposed of by thermal treatment or incineration at approved facilities. All local and national regulations should be followed.

## 14. TRANSPORT INFORMATION

**Road Transport**

**UN Number:** 1993

**Proper Shipping Name:** FLAMMABLE LIQUID, N.O.S. (Contains Xylene and 1,2,4-Trimethylbenzene)

**Dangerous Goods Class:** 3

**Packing Group:** III

**Label:** Toxic (T), Irritant (Xi)

**Air Transport**

**UN Number:** 1993

**Proper Shipping Name:** FLAMMABLE LIQUID, N.O.S. (Contains Xylene and 1,2,4-Trimethylbenzene)

**Dangerous Goods Class:** 3

**Packing Group:** III

**Label:** Toxic (T), Irritant (Xi)

**Sea Transport**

**UN Number:** 1993

**Proper Shipping Name:** FLAMMABLE LIQUID, N.O.S. (Contains Xylene and 1,2,4-Trimethylbenzene)

**Dangerous Goods Class:** 3

**Packing Group:** III

**Label:** Toxic (T), Irritant (Xi)

## 15. REGULATORY INFORMATION

**Poison Schedule:** S6 [Aust]

**Inventory Status:**

<i>Inventory</i>	<i>Status</i>
Australia (AICS)	Y
United States (TSCA)	Y
Canada (DSL)	Y
Europe (EINECS)	Y

Y = all ingredients are listed on the inventory or are not required to be listed on the inventory.

## 16. OTHER INFORMATION

**Date of Preparation:**

Issue date: 10 March 2010

Supersedes: April 2005

**Reasons for Update:**

Periodic review



# Material Safety Data Sheet

Page 8 of 8

Issue date: March 2010

## PR-1167

### Key Legend Information:

NOHSC - National Occupational Health & Safety Commission {Formerly Worksafe}[Aust]

SUSDP - Standard for the Uniform Scheduling of Drugs and Poisons [Aust]

TWA - Time Weighted Average [Int]

STEL - Short Term Exposure Limit [Int]

AICS - Australian Inventory of Chemical Substances

EPA - Environmental Protection Agency [Int]

NIOSH - National Institute for Occupational Safety and Health [US]

AS/NZS 1715 - Selection, use and maintenance of respiratory protective devices. [Aust/NZ]

AS/NZS 1716 - Respiratory protective devices. [Aust/NZ]

IATA - International Aviation Transport Authority [Int]

ICAO - International Civil Aviation Organization [Int]

IMO - International Maritime Organisation. [Int]

IMDG - International Maritime Dangerous Goods [Int]

United Nations Recommendations for the Transport of Dangerous Goods and Globally Harmonized System for the classification and labelling of Chemicals. [Int]

EU - European Union

[Aust/NZ] = Australian New Zealand

[Int] = International

[US] = United States of America

Removal of the heading of *Poison Schedule [Aust]*, in section 3 and 15 of this Material Safety Data Sheet (MSDS) makes this a valid health and safety document in other international jurisdictions/countries. For full compliance please contact your Federal, State or Local regulators for further information.

### Disclaimer

This MSDS summarises our best knowledge of the health and safety hazard information available on the product and the measures to be used to handle and use the product safely. Each user should read this MSDS and consider the information in connection with the way the product is intended to be handled or used.

### Principal References:

Information supplied by manufacturer, reference sources including the public domain.

**END OF MSDS**