



# Material Safety Data Sheet

Page 1 of 6

Issue date: August 2007

## Erasolve

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** Erasolve

**Synonym:** None

**Use:** Cleaning solvent for dissolving cured polyurethane or polyurethane primer

**Era Polymers Pty Ltd**

**25-27 Green Street**

**Banksmeadow 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:** Irritant (Xi)

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

#### RISK PHRASES

R36/38 Irritating to eyes and skin.

#### SAFETY PHRASES

S41 In case of fire and/or explosion, do not breathe fumes.

**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:

Avoid skin and eye contact.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
CYCLIC AMIDE	Greater than 60%	Proprietary

All other ingredients not hazardous according to NOHSC Criteria.

### 4. FIRST AID MEASURES

#### Swallowed:

If swallowed, DO NOT induce vomiting. Wash out mouth with water. If person is conscious give water to drink. DO NOT give anything by mouth to an unconscious person. Seek immediate medical attention immediately.

#### Eye:

If material is splashed into eyes, immediately, flush with plenty of water for 15 minutes, ensuring eyelids are held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.

#### Skin:

If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with plenty of soap and running water. Flush skin with water. Seek medical attention if irritation develops or persists after washing. Wash contaminated clothing before reuse.



# Material Safety Data Sheet

Page 2 of 6

Issue date: August 2007

## Erasolve

### **Inhaled:**

Remove victim to fresh air. Apply resuscitation if victim is not breathing. If trained personnel available administer oxygen if breathing is difficult. If symptoms develop seek medical attention.

### **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**

When heated above the flash point, releases flammable vapours. When mixed with air and exposed to ignition source, vapour can burn in open or explode if confined. Vapours may be heavier than air. May travel long distances along ground before igniting and flashing back to vapour source. Fine sprays or mists may be combustible at temperatures below normal flash point.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Incomplete combustion may produce carbon monoxide, oxides or compounds of nitrogen and other toxic gases.

**FIRE FIGHTING PROCEDURES:** Do not enter fire area without proper protection. Fight fire from safe distance or a protected location. Heat may build pressure and rupture closed containers, spreading fire, increasing risk of burns/injuries. Use water spray/fog for cooling. Avoid frothing/steam explosion. Burning liquid may float on water. Although water-soluble, it may not be practical to extinguish fire by water dilution. Notify authorities if liquid enters sewers or public waters.

**FIRE FIGHTING PRECAUTIONS:** Use self-contained breathing apparatus and body-covering protective clothing.

**EXTINGUISHING MEDIA:** Use dry chemical, carbon dioxide, water spray, alcohol resistant foam or foam to extinguish fire.

**HAZCHEM CODE:** None allocated [Aust]

### **FLAMMABILITY**

C1 Combustible liquid - Refer to *AS1940 - The Storage and Handling of Flammable and Combustible Liquids* for storage and handling information.

## 6. ACCIDENTAL RELEASE MEASURES

Release can cause fire or explosion and human health hazard. Liquids or vapours may ignite. Evacuate vicinity of spill and limit access. Equip responders with proper protection. Extinguish all ignition sources. Stop release. Prevent flow to sewers or public waters. Notify fire and environmental authorities. Impound and recover large land spill. Soak up small spill with inert solids. Use only non-sparking tools. Use suitable disposable containers. In water, material is soluble, may float or sink. Contain/recover rapidly to minimise dispersion. Disperse residue to reduce aquatic harm.

## 7. HANDLING AND STORAGE

### **HANDLING:**

Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair. Wear recommended personal protection equipment (refer to Section 8 Exposure Controls / Personal Protection). Observe precautions pertaining to confined space entry.



# Material Safety Data Sheet

Page 3 of 6

Issue date: August 2007

## Erasolve

### STORAGE:

Handle empty containers with care - residue may be combustible and burn if exposed to heat/sparks/open flame. In addition to the fire/exposure hazard, residual vapour and liquid may also be toxic. Keep container tightly closed when not in use. Store away from heat, sparks, open flames, strong oxidizing agents and direct sunlight.

## 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:

#### *CYCLIC AMIDE*

(Worksafe Australia)

[TWA] 25 ppm 103 mg/m<sup>3</sup>

[STEL] 75 ppm 309 mg/m<sup>3</sup>

Notices: Sk

(ACGIH)

[TWA] 100 ppm

### Engineering Controls

Maintain adequate general and local exhaust ventilation at all times. At elevated temperatures, special ventilation may be required even if the flash point has not been exceeded. Flammable mists or aerosols can be generated below the flash point of high boiling liquids. If exhaust ventilation is not available or inadequate, use approved respirator to Australian Standards.

### Personal Protection Equipment

**CLOTHING:** Protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn to avoid skin contact. Protective clothing should be cleaned thoroughly after each use.

**GLOVES:** Wear gloves of impervious material conforming to AS/NZS 2161.1:2000 to prevent skin contact. Final choice of appropriate glove type will vary according to individual circumstances including methods of handling and engineering controls.

**EYES:** Safety glasses with side shields, chemical goggles or face shield should be worn to protect eyes. Refer to AS/NZS 1337.

**RESPIRATORY PROTECTION:** If engineering controls are not effective in controlling airborne exposure then use an approved respirator. Select and use respirators in accordance with AS/NZS 1715/1716. The use of a respirator for organic vapours with disposable or with replaceable filters 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>	Clear liquid
<b>Boiling Point Melting Point:</b>	BP = 202°C @ 760mmHg, MP = -24 to -31°C
<b>Vapour Pressure:</b>	0.3mmHg (@ 20°C)
<b>Specific Gravity:</b>	1.026
<b>Flash Point:</b>	88°C
<b>Flammability Limits:</b>	LEL = 1.3%, UEL = 9.5%
<b>Solubility in Water:</b>	Completely soluble

### Other Properties

Autoignition temperature = 270°C

Vapour density = 3.4 (air = 1.0)

pH = 7.7 to 8.0

Hygroscopic.



# Material Safety Data Sheet

Page 4 of 6

Issue date: August 2007

## Erasolve

### 10. STABILITY AND REACTIVITY

**STABILITY:**

Stable under normal conditions of use.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Emits carbon monoxide and nitrogen oxide fumes when heated to decomposition.

**HAZARDOUS POLYMERIZATION:**

Not expected to occur.

**INCOMPATIBILITIES:**

Strong oxidizing agents and reducing agents.

**CONDITIONS TO AVOID:**

Heat, flames, ignition sources 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:**

This material may be a slight health hazard if ingested in large quantities. It may cause irritation to mouth, throat and stomach with effects including mucous build up, irritation to the tongue and lips and pains in the stomach, which may lead to nausea, vomiting and diarrhoea.

**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:**

Skin contact will cause irritation which may result in itching, redness, scaling and hives. Quickly absorbed through the skin and is capable of transporting other dissolved toxins into the body.

**Inhaled:**

No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of inhalation exposure.

**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.

**Toxicological Data:**

Human experience has demonstrated redness, cracking and blistering of skin through repeated or prolonged contact with this product. The cyclic amide was reported to be foetotoxic and to increase the incidence of skeletal abnormalities when administered dermally to rats during gestation at very high, maternally toxic doses. This material was not foetotoxic or teratogenic in rats exposed to vapours up to 0.36mg/L during gestation. This material has been reported to cause aneuploidy in saccharomyces, but is not mutagenic in the Ames test.

This material or its emissions may defat skin, cause contact dermatitis, or otherwise aggravate existing skin disease.

This material may be a slight health hazard if ingested in large quantities.

LD50 (oral, rat) = 3914 mg/kg

Irritation (dermal, rabbit) - slight irritation

Irritation (eye, rabbit) - severe irritation



# Material Safety Data Sheet

Page 5 of 6

Issue date: August 2007

## Erasolve

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:**

NOEC:

Algae = 5000mg/L

Bacteria = 5000mg/L

**DEGRADABILITY:**

BOD = 73% ThOD (28 day)

**ACCUMULATION:**

Log Pow = -0.73

Predicted bioconcentration = 0.16

**Mobility:**

This material is not volatile and is water soluble. It may enter soil and may contaminate water. It is not expected to adsorb onto soils or sediments.

**Persistence / Degradability:**

This material is expected to be readily biodegradable. This material is not expected to bioaccumulate.

**Chemical Fate Information:**

Large quantities of this material should not be discharged into drains, sewers or waterways.

### 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with all relevant Local, State and Federal regulations. Dispose of material through a licensed waste contractor. Any processing, use, or contamination of this product may change the requirements for disposal. It is the responsibility of the generator of the waste to properly classify, transport and dispose of the waste.

### 14. TRANSPORT INFORMATION

**Road Transport**

**UN Number:** None allocated

**Proper Shipping Name:** NONE ALLOCATED

**Dangerous Goods Class:** None allocated

**Packing Group:** None allocated

**Hazchem Code:** None allocated [Aust]

**Label:** Irritant (Xi)

**Air Transport**

**UN Number:** None allocated

**Proper Shipping Name:** NONE ALLOCATED

**Dangerous Goods Class:** None allocated

**Packing Group:** None allocated

**Hazchem Code:** None allocated [Aust]

**Label:** Irritant (Xi)

**Sea Transport**

**UN Number:** None allocated

**Proper Shipping Name:** NONE ALLOCATED

**Dangerous Goods Class:** None allocated

**Packing Group:** None allocated

**Hazchem Code:** None allocated [Aust]

**Label:** Irritant (Xi)



# Material Safety Data Sheet

Page 6 of 6

Issue date: August 2007

## Erasolve

### 15. REGULATORY INFORMATION

**Poison Schedule:** S6 [Aust]

**Inventory Status:**

Inventory	Status
Australia (AICS)	Y

Y = all ingredients are on the inventory.

### 16. OTHER INFORMATION

**Date of Preparation:**

Issue date: 1/08/07

Supersedes: September 2005

**Reasons for Update:**

Review of all sections.

**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**