



# Material Safety Data Sheet

Page 1 of 6

Issue date: March 2010

## Erabond 9000

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** Erabond 9000

**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:** Harmful (Xn), Irritant (Xi)

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

#### RISK PHRASES

R11 Highly flammable.  
R36 Irritating to eyes.  
R42 May cause sensitisation by inhalation.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.

#### SAFETY PHRASES

S16 Keep away from sources of ignition - No smoking.  
S23 Do not breathe fumes/vapour.  
S24/25 Avoid contact with skin and eyes.  
S26 In case of contact with eyes, rinse immediately with plenty of water and contact a doctor.  
S33 Take precautionary measures against static discharge.  
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.

**Poison Schedule:** None allocated [Aust].

#### Warning Statement:

Avoid breathing vapours. Avoid eye contact. Breathing vapours may produce asthma-like symptoms. Highly flammable liquid.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
ETHYL ACETATE	Greater than 60%	141-78-6
THIONOPHOSPHORIC ACID-TRIS-(p-ISOCYANATOPHENYL ESTER)	10 to 30%	4151-51-3
CHLOROBENZENE (Below Cut-off)	Less than 1%	108-90-7

All other ingredients not hazardous according to NOHSC Criteria.



# Material Safety Data Sheet

Page 2 of 6

Issue date: March 2010

## Erabond 9000

### 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.

**Skin:**

If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with water and soap. Flush skin with plenty of water. Seek medical attention if irritation persists.

**Inhaled:**

Remove victim to fresh air. Apply resuscitation if victim is not breathing. Administer oxygen if breathing is difficult and trained person is available. 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**

**EXTINGUISHING MEDIA:** Use dry chemical, carbon dioxide or foam. In cases of larger fires, water spray should be used.

**SPECIAL FIRE FIGHTING PROCEDURES:** Self-contained breathing apparatus (SCBA) required for fire-fighting personnel. 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.

**HAZARDOUS DECOMPOSITION PRODUCTS:** In case of fire, formation of carbon monoxide, carbon dioxide, oxides of nitrogen, isocyanate vapour or hydrogen cyanide is possible.

**HAZCHEM CODE:** 3[Y]E [Aust]

**FLAMMABILITY**

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

### 6. ACCIDENTAL RELEASE MEASURES

Do not empty into drains. Remove sources of fire, ensure adequate ventilation / exhaust ventilation. Keep unauthorised persons away. Remove mechanically; cover remainders with wet, absorbent material (e.g. sawdust, chemical binder based on calcium silicate hydrate, sand). After approximately one hour, transfer to waste container and do not seal (evolution of carbon dioxide could cause container to rupture). Keep damp in a safe ventilated area for several days.



# Material Safety Data Sheet

Page 3 of 6

Issue date: March 2010

## Erabond 9000

### 7. HANDLING AND STORAGE

Keep container dry and tightly closed in a cool and well-ventilated place. Store away from organic materials, combustible materials, oxidising agents or foodstuffs. Store away from sources of heat or ignition. Avoid skin and eye contact and inhalation of vapours. Empty containers should not be re-used. Because empty containers may retain product residue and flammable vapours, keep away from heat, sparks and flame; do not cut, puncture or weld on or near the empty container. Do not smoke where this product is used or stored.

### 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:

#### **ETHYL ACETATE**

(Worksafe Australia)

[TWA] 200 ppm 720 mg/m<sup>3</sup>

[STEL] 400 ppm 1440 mg/m<sup>3</sup>

Notices: Amended

References: H;Ch

(ACGIH)

[TWA] 400 ppm 1,440 mg/m<sup>3</sup>

Carcinogen Category: A4

#### **THIONOPHOSPHORIC ACID-TRIS-(p-ISOCYANATOPHENYL ESTER)**

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

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

(Worksafe Australia)

[TWA] 10 ppm 46 mg/m<sup>3</sup>

References: H

(ACGIH)

[TWA] 10 ppm 46 mg/m<sup>3</sup>

Carcinogen Category: A3

#### Engineering Controls

Highly flammable liquid. Maintain adequate ventilation at all times. 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 - PVC or rubber apron.

GLOVES: Wear suitable protective gloves to prevent skin contact - PVC or rubber.

EYES: Wear protective eyewear such as chemical goggles or face shield to protect eyes.

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.



# Material Safety Data Sheet

Page 4 of 6

Issue date: March 2010

## Erabond 9000

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Yellow to brownish liquid, ester-like odour
<b>Boiling Point Melting Point:</b>	BP approx. 77°C at 101.3 kPa (initial)
<b>Vapour Pressure:</b>	9.7 kPa @ 20°C
<b>Specific Gravity:</b>	Approx. 1.0 g/cm <sup>3</sup> @ 20°C (density)
<b>Flash Point:</b>	Approx. -4°C
<b>Flammability Limits:</b>	Not determined
<b>Solubility in Water:</b>	Reacts with water

#### Other Properties

Ignition temperature: approx. 460°C

Soluble in acetone, dichloromethane.

### 10. STABILITY AND REACTIVITY

#### STABILITY:

Stable under normal conditions of use.

#### HAZARDOUS DECOMPOSITION PRODUCTS:

Emits toxic fumes including oxides of carbon and nitrogen, isocyanate vapours and hydrogen cyanide when heated to decomposition.

#### HAZARDOUS POLYMERIZATION:

Will not occur under normal conditions of use.

#### INCOMPATIBILITIES:

Reacts with oxidising agents, acids, alkalis, amines, alcohols and water.

#### 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:

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:

May cause irritation to the skin, with effects including; Redness and itchiness.

##### Inhaled:

Harmful if inhaled.

May cause irritation to the nose, throat and respiratory system with effects including: Dizziness, headache and loss of co-ordination.

##### 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 contact with this substance will cause sensitisation by inhalation.



# Material Safety Data Sheet

Page 5 of 6

Issue date: March 2010

## Erabond 9000

### Toxicological Data:

There is no other toxicological information available for this product, however data is available for a comparable product:

Oral LD50 (rat) > 2000 mg/kg

Skin and mucous membrane compatibility (rabbit):

Skin - non-irritant

Eyes - slight irritant

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

There is no information available for this product.

### Mobility:

Product reacts with water at the interface forming carbon dioxide and a solid insoluble polyurea with a high melting point.

### Persistence / Degradability:

Polyurea is not readily degradable.

### Chemical Fate Information:

Do not allow product to escape into waters, wastewater or soil.

## 13. DISPOSAL CONSIDERATIONS

Dispose of in compliance with Local, State and Federal regulations. May be incinerated in a suitable facility provided local regulations are observed. After final product withdrawal, all residues must be removed from containers (drip-free, powder-free or paste-free). Once the product residues adhering to the walls of the containers have been rendered harmless, the product and hazard labels must be invalidated. Containers should be recycled or disposed of in compliance with national legislation and environmental regulations.

## 14. TRANSPORT INFORMATION

### Road Transport

UN Number: 1173

Proper Shipping Name: ETHYL ACETATE

Dangerous Goods Class: 3

Packing Group: II

Label: Harmful (Xn), Irritant (Xi)

### Air Transport

UN Number: 1173

Proper Shipping Name: ETHYL ACETATE

Dangerous Goods Class: 3

Packing Group: II

Label: Harmful (Xn), Irritant (Xi)

### Sea Transport

UN Number: 1173

Proper Shipping Name: ETHYL ACETATE

Dangerous Goods Class: 3

Packing Group: II

Label: Harmful (Xn), Irritant (Xi)



# Material Safety Data Sheet

Page 6 of 6

Issue date: March 2010

## Erabond 9000

### 15. REGULATORY INFORMATION

**Poison Schedule:** None allocated [Aust]

**Inventory Status:**

<i>Inventory</i>	<i>Status</i>
Australia (AICS)	Y

Y = all ingredients are on the inventory.

### 16. OTHER INFORMATION

**Date of Preparation:**

Issue date: 5 March 2010

Supersedes: March 2005

**Reasons for Update:**

Periodic review

**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**