



Material Safety Data Sheet

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Issue date: December 2007

Eraspray FS320 POLYOL

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Eraspray FS320 POLYOL

Synonym: None

Use: POLYURETHANE CURATIVE

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 EU CRITERIA

Hazard Category: Harmful (Xn), Corrosive (C)

Hazard Classification: HAZARDOUS SUBSTANCE, NON-DANGEROUS GOOD

RISK PHRASES

R21/22 Harmful in contact with skin and if swallowed.

R50 Very toxic to aquatic organisms.

R52 Harmful to aquatic organisms.

R53 May cause long term adverse effects in the aquatic environment.

SAFETY PHRASES

S20 When using, do not eat or drink.

S23 Do not breathe gas/fumes/vapour/spray

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 or Poisons Information Centre.

S27 Take off immediately all contaminated clothing.

S28 After contact with skin, wash immediately with plenty of soap and warm water

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately and show this container or label.

S46 If swallowed, contact a doctor or Poisons Information Centre immediately and show this container or label.

S60 This material and/or its container must be disposed of as hazardous waste.

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:

None

3. COMPOSITION / INFORMATION ON INGREDIENTS



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SUBSTANCE NAME	Proportion	CAS Number
POLYOXYPROPYLENEDIAMINE	30 to 60%	9046-10-0
DIETHYLTOLUENE DIAMINE [DETDA] (Below Cutoff)	1 to 10%	68479-98-1
DIETHANOLAMINE (Below Cutoff)	1 to 10%	111-42-2
DIBUTYL TIN DILAURATE (Below Cutoff)	Less than 1%	77-58-7
TERTIARY AMINE CATALYST (Below Cutoff)	1 to 10%	Mixture
SURFACTANT	Less than 1%	Mixture
BIS(2-DIMETHYLAMINOETHYL) ETHER (Below Cutoff)	Less than 1%	3033-62-3

All other ingredients not hazardous according to EU Criteria.

4. FIRST AID MEASURES

Swallowed:

If swallowed, DO NOT induce vomiting. If person is conscious give water to drink. Seek medical attention immediately.

Eye:

If material is splashed into eyes, immediately, flush with plenty of water for 15 minutes, ensuring eyelids are held open. If irritation persists 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 water. Seek medical attention if irritation persists after washing.

Inhaled:

Remove victim to fresh air. Apply resuscitation if victim is not breathing. If trained personnel available administer oxygen if breathing is difficult.

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

If safe to do so, move undamaged containers from fire area.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposes on heating emitting toxic and/or irritating fumes including carbon monoxide and carbon dioxide.

FIRE FIGHTING PROCEDURES: Fire fighters to wear Self-Contained Breathing Apparatus (SCBA) in confined spaces, in oxygen deficient atmospheres or if exposed to products of decomposition. Full protective clothing is also recommended.

EXTINGUISHING MEDIA: Use extinguishing media suitable for surrounding fire situation. Use foam, water spray (fog), CO₂ or dry powder. Use water spray to cool fire-exposed containers and for large fires.

Additional information for Fire

Use foam, carbon dioxide, dry powder, water spray.

Do not use Full water jet



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HAZCHEM CODE: None allocated [Aust]

FLAMMABILITY

This product is not flammable.

6. ACCIDENTAL RELEASE MEASURES

Material may be slippery when spilt. Walk cautiously. Ventilate area. Wear protective equipment to prevent skin and eye contact, as outlined in Section 8 of this Material Safety Data Sheet. Bund area using sand or soil - to prevent run off into drains and waterways. Use absorbent (soil, sand, vermiculite or other inert material). Collect and seal in properly labelled containers for disposal.

7. HANDLING AND STORAGE

Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition. Store away from oxidising agents. Keep containers closed when not using the product. Store in original packages as approved by manufacturer. Purge with nitrogen and close container when not in use. Do not eat, drink or smoke in the workplace.

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:

POLYOXYPROPYLENEDIAMINE

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

DIETHYLTOLUENE DIAMINE [DETD] (Below Cutoff)

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

DIETHANOLAMINE (Below Cutoff)

(Worksafe Australia)

[TWA]3 ppm 13 mg/m³

References: H

(ACGIH)

[TWA]0.46 ppm 2 mg/m³

Notices: Sk

DIBUTYLTIN DILAURATE (Below Cutoff)

(Worksafe Australia)

[TWA]0.1 mg/m³

[STEL]0.2 mg/m³

(ACGIH)

[TWA]0.1 mg/m³

Carcinogen Category: A4

TERTIARY AMINE CATALYST (Below Cutoff)

No Exposure details available



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SURFACTANT

No Exposure details available

BIS(2-DIMETHYLAMINOETHYL) ETHER (Below Cutoff)

(ACGIH)

[TWA]5 ppm 9.4 mg/m³

[STEL]10 ppm 19 mg/m³

Engineering Controls

Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate unless the material is heated, reacted or otherwise changed in some type of chemical reaction, then the use of a local exhaust ventilation system is recommended. If exhaust ventilation is not available or inadequate, use approved respirator to Australian Standards.

Additional information for Engineering Controls

Store away from heat and direct sunlight

Personal Protection Equipment

CLOTHING: Wear suitable protective clothing to prevent skin contact.

GLOVES: Wear impervious gloves to prevent skin contact - PVC or natural rubber.

EYES: Wear safety glasses with side shields, 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. 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

Appearance:	Clear to hazy thin liquid
Boiling Point Melting Point:	Not determined
Vapour Pressure:	Not determined
Specific Gravity:	Approx 1
Flash Point:	Not determined
Flammability Limits:	Not determined
Solubility in Water:	Very slightly soluble

Other Properties

None

10. STABILITY AND REACTIVITY

STABILITY:

Stable under normal conditions of use.

HAZARDOUS DECOMPOSITION PRODUCTS:

Emits smoke and fumes when heated to decomposition.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITIES:

Strong alkalis, acids, oxidizing agents, isocyanates

CONDITIONS TO AVOID:

Heat, flames, ignition sources and incompatibles.



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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:

Harmful if swallowed.

Will cause burns to the mouth, mucous membranes, throat, oesophagus and stomach. If sufficient quantities are ingested (swallowed) death may occur.

Eye:

Will cause burns to the eyes with effects including: Pain, tearing, conjunctivitis and if duration of exposure is long enough, blindness will occur.

Skin:

Harmful by skin contact.

Will cause burns to the skin, with effects including; Redness, blistering, localised pain and dermatitis.

Inhaled:

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

Chronic:

Prolonged or repeated skin contact may lead to dermatitis.

Product may also be absorbed through the skin with resultant toxic effects.

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

Prolonged or repeated skin contact will lead to necrosis (death) of the skin.

Additional information for Chronic

DIETHYLTOLUENEDIAMINE [DETDA]:

Diethyltoluenediamine (DETDA) has acute oral (rat) and dermal (rabbit) LD50 values of 485 mg/kg and 700 mg/kg, respectively. A two-year feeding study (rats) showed DETDA caused adverse effects in the pancreas, liver, thyroid, and eyes. An increase in the number of tumours in the liver and thyroid of male rats, and in the liver and possibly mammary gland of female rats was found. In rare cases, sensitisation to DETDA has been reported to occur in humans.

Toxicological Data:

There is no other toxicological information available for this product.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Harmful to aquatic organisms

Mobility:

KEEP OUT OF WATERWAYS AND DRAINS

Persistence / Degradability:

This product is not biodegradable

Chemical Fate Information:

This substance is Harmful to aquatic organisms

This substance is Very Toxic to aquatic organisms

This substance may cause long term adverse effects in the aquatic environment.

This substance may cause long term adverse effects in the environment



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13. DISPOSAL CONSIDERATIONS

Refer to appropriate authority in your State. Dispose of material through a licensed waste contractor. Advise flammable nature. Normally suitable for disposal by approved waste disposal agent.

14. TRANSPORT INFORMATION

Road Transport

UN Number: None allocated

Proper Shipping Name: NONE ALLOCATED

Dangerous Goods Class: None allocated

Packing Group: None allocated

Label: Harmful (Xn), Corrosive (C)

Air Transport

UN Number: None allocated

Proper Shipping Name: NONE ALLOCATED

Dangerous Goods Class: None allocated

Packing Group: None allocated

Label: Harmful (Xn), Corrosive (C)

Sea Transport

UN Number: None allocated

Proper Shipping Name: NONE ALLOCATED

Dangerous Goods Class: None allocated

Packing Group: None allocated

Label: Harmful (Xn), Corrosive (C)

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: 11/12/2007

Supersedes: First Issue

Reasons for Update:

None

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]



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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