



Material Safety Data Sheet

Page 1 of 7

Issue date: July 2008

ERASPRAY ESU950 POLYOL

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: ERASPRAY ESU950 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, DANGEROUS GOOD

RISK PHRASES

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

R34 Causes burns.

R48 Danger of serious damage to health by prolonged exposure.

R50 Very toxic to aquatic organisms.

R52 Harmful to aquatic organisms.

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

SAFETY PHRASES

S22 Do not breathe dust.

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.

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

Poison Schedule: S5 [Aust]

This material is a Scheduled **S5** Poison and must be stored, handled and used according to the appropriate regulations..

Warning Statement:

Harmful. Corrosive



Material Safety Data Sheet

Page 2 of 7

Issue date: July 2008

ERASPRAY ESU950 POLYOL

3. COMPOSITION / INFORMATION ON INGREDIENTS

| SUBSTANCE NAME | Proportion | CAS Number |
|--------------------------------|------------|------------|
| DIETHYLTOLUENE DIAMINE [DETDA] | 10 to 30% | 68479-98-1 |
| POLYOXYPROPYLENEDIAMINE | 30 to 60% | 9046-10-0 |
| AROMATIC AMINE (Below Cutoff) | 1 to 10% | 5285-60-9 |

All other ingredients not hazardous according to EU Criteria.

4. FIRST AID MEASURES

Swallowed:

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

Eye:

If material is splashed into eyes, flush with plenty of water for at least 15 minutes, ensuring eye lids are held open. Immediately transport to hospital or doctor.

Skin:

If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with water and soap if available.

Inhaled:

Remove victim to fresh air. Apply resuscitation if victim is not breathing - DO NOT USE DIRECT MOUTH - TO - MOUTH METHOD if victim ingested or inhaled substance; use alternative respiratory method or proper respiratory device -

First Aid Facilities:

Eye wash fountain, safety shower and normal wash room 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

CAUTION: Use of water spray when fighting fire may be inefficient.

EXTINGUISHING MEDIA: Use dry chemical, carbon dioxide, foam or water fog.

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: If tanks, drums or containers of this material are heated, they may rupture and project corrosive liquids over a wide area.

HAZCHEM CODE: 2X [Aust]

FLAMMABILITY

Not flammable or combustible. If involved in a fire may generate noxious and corrosive fumes.



Material Safety Data Sheet

Page 3 of 7

Issue date: July 2008

ERASPRAY ESU950 POLYOL

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY ACTION:

Keep unnecessary people away; Isolate hazard area and deny entry. Stay upwind; Keep out of low areas. Isolate for 800 m in all directions if tank, rail car or tanker truck is involved in fire.

SPILL OR LEAK PROCEDURE:

Shut off ignition sources, no flares, smoking or flames in hazard area. Stop leak if you can do it without risk. Water spray may reduce vapour; but it may not prevent ignition in closed spaces.

SMALL SPILLS:

Take up with sand, dirt or vermiculite. DO NOT use sawdust. Use non-sparking tools. Place into labelled drum(s) for later disposal.

LARGE SPILLS: Notify Emergency Services (Police or Fire Brigade). Tell them location, nature and any information that would be helpful. Contain spill. Remove all ignition sources and safely stop flow of spill. Bund area. Trained personnel should wear Personal Protective equipment as highlighted in this MSDS. Blanket the spill with foam or use water fog to disperse vapour clouds. Consult an expert regarding disposal of this product.

7. HANDLING AND STORAGE

Many of these substances are reactive with water and may cause noxious and toxic fumes to be generated. Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition, strong alkalis, acids, combustibles and oxidizing agents. All equipment must be earthed. Store in original packages as approved by manufacturer. Check all fittings, valves, reticulation (piping) and any ancillary equipment for leaks. A supplied air respirator or a Self-Contained Breathing Apparatus (SCBA) for emergencies should be available and checked regularly. For further information please refer to the Engineering Controls of this MSDS.

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:

DIETHYLTOLUENE DIAMINE [DETDA]

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

POLYOXYPROPYLENEDIAMINE

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

AROMATIC AMINE (Below Cutoff)

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

Engineering Controls

Corrosive liquid. Single significant exposure may cause severe injury. Maintain adequate ventilation at all times.

Prevent accumulation of gas(es) in hollows or sumps. Eliminate any sources of ignition.

Exposure to this material may be controlled in a number of ways. The measures appropriate for a particular worksite depend on how the material

is used and on the potential for exposure. Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions. If engineering controls and work practices are not effective in preventing or controlling exposure, then suitable personal protective equipment, which is known to perform satisfactorily, should be used.

Personal Protection Equipment

CLOTHING: PVC, Nitrile, Neoprene, Natural rubber or any other type of apron or splash suit as recommended by the manufacturer.



Material Safety Data Sheet

Page 4 of 7

Issue date: July 2008

ERASPRAY ESU950 POLYOL

GLOVES: PVC, Nitrile, Neoprene, Natural rubber or any other type of glove as recommended by the manufacturer.

EYES: Chemical goggles or faceshield to protect eyes.

RESPIRATORY PROTECTION: Avoid breathing of gases. Select and use respirators in accordance with AS/NZS 1715/1716. When the concentration of airborne contaminants reach the exposure standards then the use of a half-face respirator with acid vapour cartridge is recommended. For high concentration use a atmosphere-supplied, positive pressure demand self-contained or airline breathing apparatus supplied air respirator complying with the requirements of AS/NZS 1715 is recommended. Filter capacity and respirator type depends on exposure levels.

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. The use of fully-encapsulating, gas-tight suits is also recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-------------------------------------|----------------|
| Appearance: | Brown liquid |
| Boiling Point Melting Point: | Not determined |
| Vapour Pressure: | Not determined |
| Specific Gravity: | 1.04 @ 20 °C |
| Flash Point: | Not determined |
| Flammability Limits: | Not determined |
| Solubility in Water: | Not determined |

Other Properties

None

10. STABILITY AND REACTIVITY

STABILITY:

Stable under normal conditions of use.

HAZARDOUS DECOMPOSITION PRODUCTS:

Emits choking and corrosive fumes when heated to decomposition.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITIES:

Strong alkalis and oxidizing 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:

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.



Material Safety Data Sheet

Page 5 of 7

Issue date: July 2008

ERASPRAY ESU950 POLYOL

Skin:

Harmful by skin contact.

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

Inhaled:

Harmful if 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 exposure may lead to permanent irreversible injury.

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

Additional information for Chronic

Toxicological Data:

SEVERE EFFECTS AFTER REPEATED OR PROLONGED EXPOSURE

This substance is capable of causing serious damage to health and is determined to be a hazardous substance.

Serious damage is where a clear functional disturbance or morphological change which has toxicological significance results from repeated or prolonged exposure by an appropriate route.

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.

POLYOXYPROPYLENEDIAMINE

Oral LD50 (rat) = believed to be 480 mg/kg

Dermal LD50 (rabbit) = believed to be 2.09 g/kg

Inhalation LC50 = no data

Skin Irritation: this material is expected to be corrosive.

Eye Irritation: this material is expected to cause irreversible effects to the cornea with impairment of vision or corrosion to the eyes.

Reproductive and Developmental Toxicity: not known or reported to cause reproductive or developmental toxicity.

Mutagenicity: not known or reported to be mutagenic.

Carcinogenicity: this chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

No information available for this product.

Mobility:

No information available for this product.

Persistence / Degradability:

No information available for this product.



Material Safety Data Sheet

Page 7 of 7

Issue date: July 2008

ERASPRAY ESU950 POLYOL

16. OTHER INFORMATION

Date of Preparation:

Issue date: 29 July 2008

Supersedes: None

Reasons for Update:

First Issue

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