



# Material Safety Data Sheet

## 1. Identification of the substance/mixture and supplier

Product Name: **Duracrete EMT Hardener**

Recommended use: Epoxy hardener

Supplier: Uroxsys Ltd

Street Address: 2 Stonedon Drive, East Tamaki, Auckland

Telephone Number: +64 9 2740808

Facsimile: +64 9 2740500

Emergency Telephone: After hours phone 0800 867666 (or 09 3034580), quote reference: Uroxsys Helpline

ERMA Approval: HSR002658

## 2. Hazards identification

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001  
Classified as Dangerous Goods by NZS 5433:1999 Transport of Dangerous Goods on Land.

Subclass 6.1 Category D - Substances which are acutely toxic

Subclass 6.5 Category B - Substances that are contact sensitisers

Subclass 8.2 Category B - Substances that are corrosive to dermal tissue

Subclass 8.3 Category A - Substances that are corrosive to ocular tissue

Subclass 9.1 Category D - Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action.

Subclass 9.3 Category C - Substances that are harmful to terrestrial vertebrates

Risk phrases: R34 Causes burns  
R23 Toxic by inhalation  
R36/37/38 Irritating to eyes, respiratory system and skin.  
R43 May cause sensitisation by skin contact.

Safety Phrases S23 Do not breathe vapour  
S24/25 Avoid contact with skin and eyes  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
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.

## 3. Composition/information on hazardous ingredients

Methylenebis(cyclohexyl)amine, 4,4-	1761-71-3	30-60%
benzyl alcohol	100-51-6	30-60%
cyclohexylamine, 4,4- reaction products with bisphenol A diglycidylether homopolymer	129733-57-9	10-30%

## 4. First-aid measures

If poisoning occurs, contact a doctor or Poisons Information Centre Phone 0800 764 766.

**Ingestion:** If swallowed, do not induce vomiting. Seek immediate medical assistance. If person vomits, prevent aspiration of vomit. Put person in recovery position. Turn victim's head to the side.

**Inhalation:** If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. Move to fresh air.

**Skin Contact:** If skin contact occurs, immediately remove contaminated clothing and wash skin thoroughly. Seek medical advice.

**Eye Contact:** Immediately flush eyes with water for at least 15 minutes and see a doctor.

**Notes to physician:**

Application of corticosteroid cream has been effective in treating skin irritation.

**5. Fire-fighting measures**

**Specific Hazards:** Corrosive substance

**Fire-fighting advice:** On burning will emit toxic fumes including ammonia gas and nitrogen oxide gas. Keep containers cool with water spray. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing. Do not allow run off to enter drains or water courses.

**Suitable Extinguishing Media:**

Foam, dry agent (carbon dioxide, dry chemical powder).

**Hazchem Code:** 3X

**6. Accidental release measures**

**Emergency procedures:** If contamination of sewers or waterways has occurred advise local emergency services.

**Methods for containment & clean up:**

Wear self contained breathing apparatus and protective equipment to prevent skin and eye contamination and inhalation of vapours. Evacuate area. Contain - prevent runoff into drains and waterways. Use absorbent material (sand or earth). Collect and seal in properly labeled containers for disposal.

**7. Handling and storage**

**Handling advice:** Avoid skin and eye contact and breathing in vapour. Keep out of reach of children.

**Storage advice:** Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

**8. Exposure controls/personal protection**

**Occupational Exposure Limits:**

No value assigned for this specific material by the New Zealand Occupational Safety and Health Service (OSH).

**Engineering Control Measures:**

Ensure ventilation is adequate.

**Personal Protective Equipment:**

Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

## 9. Physical and chemical properties

Physical state:	Liquid
Colour:	Colourless
Solubility:	<0.1 g/l
Specific Gravity:	1.03
Flash Point (°C):	112°C
Flammability Limits (%):	Not available
Boiling Point/Range (°C):	207°C

## 10. Stability and reactivity

**Stability:** Stable at normal temperatures and storage conditions. Incompatible with strong acids and oxidizing agents.

## 11. Toxicological information

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

**Ingestion:** May cause severe burning of the mouth and upper gastrointestinal tract with pain, bleeding, vomiting, diarrhea and decreased blood pressure.

**Eye contact:** Causes burns. May cause eye corrosion with corneal or conjunctival ulceration. High concentrations of vapours will cause irritation.

**Skin contact:** Causes burns or ulceration. May cause allergic skin rashes.

**Inhalation:** Inhalational overexposure may cause nose, throat, or lung irritation.

### Long Term Effects:

Prolonged or repeated exposure may cause skin sensitization or other allergic response.

### Toxicological Data:

Oral LD50 (rat): >2000 mg/kg, Skin LD50 (rat) >2110 mg/kg, Inhalation 4 hour ALC: 3.2 mg/l

For constituent benzyl alcohol:

Inhalation LC50 (rat) >4.178 mg/l

## 12. Ecotoxicological information

Avoid contaminating waterways.

Benzyl alcohol LC50 (96 h): 460 mg/l Fathead minnow

Methylenebiscyclohexanamine, 4,4- (96 h) 46-100 mg/l, Golden orfe

## 13. Disposal considerations

Refer to Waste Management Authority. Dispose of material through a licensed waste contractor.

## 14. Transport information

Road and Rail Transport

Classified as Dangerous Goods by NZS 5433:1999 Transport of Dangerous Goods on Land.

UN No: 2735

Class-primary 8 Corrosive

Packing Group: II

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, NOS (4,4'-methylenebiscyclohexanamine)

Hazchem Code: 3X

#### Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN No: 2735

Class-primary: 8 Corrosive

Packing Group: II

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, NOS (4,4'-methylenebiscyclohexanamine)

#### Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No: 2735

Class-primary: 8 Corrosive

Packing Group: II

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, NOS (4,4'-methylenebiscyclohexanamine)

### 15. Regulatory information

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001

Subclass 6.1 Category D - Substances which are acutely toxic

Subclass 6.5 Category B - Substances that are contact sensitisers

Subclass 8.2 Category B - Substances that are corrosive to dermal tissue

Subclass 8.3 Category A - Substances that are corrosive to ocular tissue

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Subclass 9.3 Category C - Substances that are harmful to terrestrial vertebrates

### 16. Other information

This MSDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Uroxsys Limited cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact Uroxsys Limited at the contact details on page 1.

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