

# Safety Data Sheet



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

Product Name:	ECS Winter Hardener/ ECS Summer Hardener
Other Names:	
Recommended use:	Hardener for ECS epoxy systems
Supplier:	Uroxsys Ltd
Street Address:	2 Stonedon Drive, East Tamaki, Auckland
Telephone Number:	+64 9 2740808 (8.00am to 5.00pm, Monday to Friday)
Facsimile:	+64 9 2740500
Emergency Telephone:	After hours phone 0800 867666 (or 09 3034580), quote reference: Uroxsys Helpline
National Poison Information Centre	0800 POISON (764766)
Date of issue	11 <sup>th</sup> July 2018

## 2. Hazards identification

### DANGER



3.1D, 6.1E(Oral), 8.2B, 8.3A, 9.1B

EPA Approval:HSR002658

Surface Coatings and Colourants (Corrosive) Group Standard 2001

### Hazard Statements:

H227 Combustible liquid  
H303 May be harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H411 Toxic to aquatic life with long lasting effects.

### Prevention Statements

P102 Keep out of reach of children.  
P103 Read label before use.  
P210 Keep away from heat/sparks/open flame/hot surfaces – No smoking  
P260 Do not breathe fume/gas/mist/vapours/spray.  
P264 Wash hands thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/eye protection/face protection.

## Response Statements

P101 If medical advice is needed, have product container or label at hand.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P363 Wash contaminated clothing before reuse.

P370+P378 In case of fire: use alcohol resistant foam for extinction

P391 Collect spillage.

## Storage Precautionary Statement

P403+P235 Store in well ventilated place. Keep cool.

P405 Store locked up.

## Disposal Precautionary Statement

P501 Do not contaminate storm water with product or product washing. Do not pour product down the drain. Unwanted product should be reacted with appropriate quantity of resin and be brushed out on newspaper, allowed to dry and then disposed of via domestic waste collection. Empty containers should be left open in a well-ventilated area to dry out. When dry, recycle the container via recycling programmes. Disposal of empty paint containers via domestic recycling programmes may differ between local authorities. Check with your local council first.

## 3. Composition/information on ingredients

Material	CAS No	%
Amine adduct	111439-78-2	20 – 40
Diaminocyclohexane	694-83-7	20 – 40
2-methylpentamethylenediamine	15520-10-2	20 – 40
2,4,6-tris(dimethylaminomethyl) phenol	90-72-2	< 10
3-(Triethoxysilyl) propylamine	919-30-2	< 5

## 4. First-aid measures

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

Ingestion:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
Inhalation:	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin Contact:	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

Eye Contact:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Notes to physician:	Perforation of the gastrointestinal tract may occur 2-4 days after ingestion.

## 5. Fire-fighting measures

Hazards from combustion:	Corrosive substance
Fire-fighting advice:	On burning will emit toxic fumes including those of oxides of nitrogen and oxides of carbon. Keep containers cool with water spray. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing.
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 protective equipment to prevent skin & eye contact. Wipe up with rag or absorbent paper.
For large spills:	Wear protective equipment to prevent skin and eye contamination and inhalation of vapours. Contain - prevent runoff into drains and waterways. Use absorbent material (sand or earth). Collect and seal in properly labelled 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 sources of heat or ignition. 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 Worksafe NZ.
Engineering Control Measures:	Ensure ventilation is adequate. Keep containers closed when not in use.
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:	Clear amber liquid
Solubility in water:	Negligible
Specific Gravity:	1.0
Flash Point (°C):	75°C
Flammability Limits (%):	Not available
Boiling Point/Range (°C):	>170°C
Colour	Amber

## 10. Stability and reactivity

Stability:	Stable at normal temperatures and storage conditions.
Incompatible materials:	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, diarrhoea and decreased blood pressure.
Eye contact:	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:	No LD50 data available for the product. However, for constituent 2-methylpentamethylenediamine: Dermal LD50 (rabbit) 1870 mg/kg, Inhalation LC50 (rat) 4.9 mg/l/1h, Oral LD50 (rat) 1170 mg/kg Diaminocyclohexane: Dermal LD50 (rat) 1870 mg/kg, Inhalation LC50 (rat) 1.23 mg/l/4h, Oral LD50 (rat) 1170 mg/kg

## 12. Eco toxicological information

Avoid contaminating waterways.

For constituent:

2-methylpentamethylenediamine

Algae EC50 >100mg/l, 72 hours, Crustacea EC50 19.8 mg/l 48 hours, Fish EC50 1825 mg/l

Diaminocyclohexane

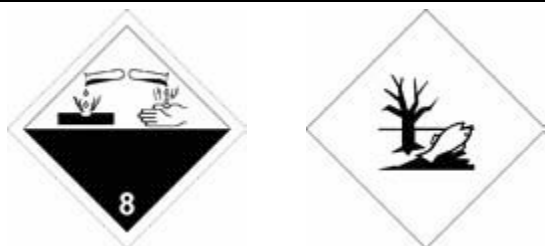
Algae EC10 118mg/l, 72 hours, Freshwater Invertebrate EC10 4.16 mg/l, Daphnia EC50 3.15mg/l, 48 hours, Fathead minnow (Pimephales promelas) EC50 1825 ppm, 96 hours

### 13. Disposal considerations

Refer to Waste Management Authority. Advise flammable nature. Dispose of material through a licensed waste contractor. Normally suitable for incineration by an approved agent.

Empty container: Do not contaminate storm water with product or product washing. Do not pour product down the drain. Unwanted product should be reacted with appropriate quantity of resin and be brushed out on newspaper, allowed to dry and then disposed of via domestic waste collection. Empty containers should be left open in a well-ventilated area to dry out. When dry, recycle the container via recycling programmes. Disposal of empty paint containers via domestic recycling programmes may differ between local authorities. Check with your local council first.

### 14. Transport information



#### Road and Rail Transport

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

UN No: 2735

Class-primary 8 Corrosive

Packing Group: II

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, NOS  
(diaminocyclohexane&methylpentamethylenediamine)

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  
(diaminocyclohexane&methylpentamethylenediamine)

#### 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  
(diaminocyclohexane&methylpentamethylenediamine)

## **15. Regulatory information**

EPA Approval:HSR002658

Surface Coatings and Colourants (Corrosive) Group Standard 2001

## **16. Other information**

This SDS 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.

While Uroxsys Ltd believes that the information contained herein is based on data considered accurate, no warranty or representation is expressed or implied for which Uroxsys Ltd assumes legal responsibility.

This version replaces all previous versions.

END OF SDS