



Material Safety Data Sheet

1. Identification of the substance/mixture and supplier

Product Name: **Duracoat ESF-80 Resin**

Recommended use: High performance two component epoxy coating

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: HSR002657

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 3.1 Category D (low hazard) - Flammable liquid

Subclass 6.1 Category E – Substances which are acutely toxic

Subclass 6.3 Category A - Substances that are irritating to the skin

Subclass 6.4 Category A - Substances that are irritating to the eye

Subclass 6.5 Category B - Substances that are contact sensitisers

Subclass 9.1 Category B - Substances that are ecotoxic in the aquatic environment

Risk phrases: R36/38 Irritating to eyes and skin

R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

Safety Phrases 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

Product Description:

Bisphenol A/epichlorohydrin	25085-99-8	30-60% R36/38,R43,R51/53
Ethylene glycol monobutyl ether	111-76-2	10-30% R22

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. Begin artificial respiration if breathing has stopped. Use mouth to nose rather than mouth to mouth.

Inhalation: Remove victim from area of exposure. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Get to a hospital or doctor quickly.

Skin Contact: If skin contact occurs, immediately remove contaminated clothing and wash skin thoroughly using soap if available. If irritation occurs seek medical advice.

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

Notes to physician:

Treat symptomatically. If skin sensitization has developed and causal relationship has been confirmed, further exposure should not be allowed.

5. Fire-fighting measures

Specific Hazards: Not classified as flammable but will burn. Carbon monoxide may be evolved if incomplete combustion occurs.

Fire-fighting advice: Fire fighters to wear self-contained breathing apparatus and suitable protective clothing. Keep adjacent containers cool by spraying with water.

Suitable Extinguishing Media:

Carbon dioxide, dry chemical, foam or water fog.

Hazchem Code: 2X

6. Accidental release measures

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

Methods for containment & clean up:

For small spills: Avoid accidents, clean up immediately. 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 labeled containers for disposal.

7. Handling and storage

Handling advice: Avoid skin and eye contact and breathing in vapours.

Storage advice: Keep container tightly closed and dry. Store at ambient temperatures. Store away from foodstuffs.

8. Exposure controls/personal protection

Occupational Exposure Limits:

For Ethylene glycol monobutyl ether: TWA 25 ppm, 121 mg/m³

Engineering Control Measures:

Ensure ventilation is adequate.

Personal Protective Equipment:

Wear overalls, chemical goggles and rubber 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:	Pigmented liquid
Solubility:	Negligible
Specific Gravity:	Not determined
Flash Point (°C):	68°C
Flammability Limits (%):	1.3 -13
Boiling Point/Range (°C):	>167°C

10. Stability and reactivity

Stability: Stable at normal temperatures and storage conditions. Reacts with strong oxidizing agents.

Hazardous decomposition products: Not expected to form any during normal storage.

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: Moderately toxic.

Eye contact: Slightly irritating to eyes.

Skin contact: Slightly irritating to skin. Has caused allergic skin reaction in humans.

Inhalation: Moderately toxic. Vapour is irritating to the nose, throat and lungs.

Long Term Effects:

Prolonged or repeated exposure may cause skin sensitization.

Toxicological Data:

No LD50 data available for the product. However, for constituent Bisphenol A/epichlorhydrin:

Oral LD50 (rat) >5000 mg/kg, Dermal LD50 (rabbit) >20000 mg/kg

For ethylene glycol monobutyl ether:

Oral LD50 (rat) 560 mg/kg, Dermal LD50 (rat) between 1800 mg/kg, LC50 (mouse) 3.36mg/l/4hr

12. Ecotoxicological information

Avoid contaminating waterways. Not readily biodegradable. Has the potential to bioaccumulate. If product enters soil, it will be mobile and may contaminate groundwater.

Acute toxicity – fish; Toxic, 1>LC/EC/IC 50 <= 10 mg/l

13. Disposal considerations

Incineration. If not possible then 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.: 3082

Class: 9

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS (EPOXY RESIN)

Hazchem: 2X

Packing Group: III

Marine Transport

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

UN No.: 3082

Class: 9

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS (EPOXY RESIN)

Packing Group: III

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.: 3082

Class: 9

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS (EPOXY RESIN)

Packing Group: III

15. Regulatory information

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

Subclass 3.1 Category D (low hazard) - Flammable liquid

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Subclass 6.3 Category A - Substances that are irritating to the skin

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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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