



# MATERIAL SAFETY DATA SHEET

## EPOXY DOMING RESIN HARDENER

Effective Date : March 2017

Page 1 of 4

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### I. Product Information

**MANUFACTURER:** Norski Holdings Ltd, 10 Northpoint Street, Plimmerton, 5024 New Zealand

**PRODUCT NAME:** Epoxy Doming Resin Hardener.

**CHEMICAL FAMILY:** Contains Polyoxypropylenamines.

**DOT HAZARD CLASSIFICATION:** Corrosive Liquid, n.o.s. UN 1760.

**FORMULA/MOLECULAR WEIGHT:** Mixture.

**HAZCHEM:** 2R.

### II. Hazardous Ingredients

**MATERIAL/COMPONENT:** Poly(oxymethyl-1, 2ethanediyl), Alpha-(2-aminomethylethyl), Omega-(2-aminomethylethyl)

**CAS NUMBER:**

9046100 **CONTENTS %:**

50% **ACGIH TLV:** None

est. **OSHA (PEL):** N/A

**STEL:** N/A

**MATERIAL/COMPONENT:** Isophorone Diamine

**CAS NUMBER:** 2855-13-2

**CONTENTS %:** 15%

**ACGIH TLV:** None est.

**OSHA (PEL):** N/A

**STEL:** N/A

**MATERIAL/COMPONENT:** Triethylenetetramine

**CAS NUMBER:** 112-24-3

**CONTENTS %:** 10%

**ACGIH TLV:** None est.

**OSHA (PEL):** N/A

**STEL:** N/A

**MATERIAL/COMPONENT:** Phenol (hydroxybenzene)

**CAS NUMBER:** 108-95-2

**CONTENTS %:** <5%

**ACGIH TLV:** 5 ppm

**OSHA (PEL):** 5 ppm

**STEL:** 10 ppm

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Page 2 of 4

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### III. Physical Data

**BOILING POINT:** <90C

**MELTING POINT:** N/A

**SOLUBILITY/WATER:**

Appreciable % **VOLATILE:** Nil

**SPECIFIC GRAVITY:** 0.97

**VAP.PR:** <1mm Hg 20C

**EVAPORATION RAT:** Slower than Butyl

Acetate **VAP. DENSITY:** Heavier than air

**pH:** No info.

**FREEZING POINT:** No info.

**VISCOSITY:** 100cps (25C)

**CRITICAL TEM:** No info.

**APPEARANCE AND ODOUR:** Pale coloured liquid with amine odour.

### IV. Fire & Explosion Hazard Data

**FLASH POINT:** 124°C (PMCC)

**AUTO IGNITION TEMP:** >300C

**FLAMMABLE LIMITS IN AIR (%):** LOWER - No Data; Upper : UPPER: No Data  
**EXTINGUISHING MEDIA:** Foam, CO<sub>2</sub>, Dry Chemical.

**SPECIAL FIRE FIGHTING PROCEDURES:** Do not direct a solid stream of water into hot, burning pools, as this may cause frothing and increasing fire intensity. Wear self-contained breathing apparatus and complete personal protective equipment.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Closed containers may rupture (due to build up of pressure) if exposed to extreme heat. Nitrogen oxides may form.

### V. Reactivity Data

**PRODUCT CORROSIVE:** Yes to skin. **STABILITY:** Stable

**HAZARDOUS POLYMERISATION:** Will not occur by itself, but a mass of more than 500gm of product plus an epoxy resin will cause irreversible polymerisation and significant build-up.

**CONDITIONS TO AVOID:** Excessive heating over long periods.

**MATERIALS TO AVOID:** Strong oxidants, acids, halogenated organic compounds such as methylene chloride. See Section 10. Do not mix with nitrites which may form carcinogenic nitrosamines.

**HAZARDOUS DECOMPOSITION PRODUCTS:** The by-products expected in incomplete pyrolysis or combustion are mainly carbon dioxide, carbon monoxide and nitrogen oxides. Toxic fumes.

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Page 3 of 4

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### **VI. Health Hazard Data**

**INGESTION:** Moderately toxic. Will cause severe irritation or burns of the mouth, throat, oesophagus and stomach. There may be swelling or ulceration with pain in the mouth and throat, discomfort or pain in the chest and abdomen, nausea, vomiting, diarrhoea, dizziness, drowsiness, faintness, thirst, weakness, circulatory collapse, and coma. Aspiration into lungs may occur during vomiting resulting in lung injury.

**INHALATION:** Excessive exposure may cause irritation to upper respiratory tract. **EYE:** May cause severe irritation with corneal injury.

**SKIN CONTACT:** Corrosive. Expected to cause severe skin damage with burns and blistering. May cause allergic skin response. **CHRONIC EFFECTS OF OVER-EXPOSURE:** Possible irritation and sensitisation.

**OTHER:** Referral to a physician is recommended if there is any question about the seriousness of an injury.

### **VII. Emergency and First Aid Procedures**

**INGESTION:** Do not induce vomiting. Give large amounts of water or milk.

**INHALATION:** Remove to fresh air if effects occur. If not breathing apply respiration. Contact a physician. **EYE CONTACT:** Immediately flush eye with water for 15 minutes. Contact a physician.

**SKIN:** Wash off in flowing water or shower. Consult a physician. De-contaminate clothing and accessories before re-use.

**NOTES TO PHYSICIAN:** Hazards from this material are mainly due to its moderately severe corrosive effects on skin and mucosal surfaces. No specific antidote. Treatment should be directed at control of symptoms and the clinical condition of the patient.

**EMERGENCY:** 0800 POISON (764 766)

### **VIII. Spills, Leaks, Handling and Storage Procedures**

**SPILL AND LEAK PROCEDURES:** Wear suitable protective clothing. Avoid contact with material. Soak up in absorbent material or scrape up. Residual can be removed with using water as solvent.

**WASTE DISPOSAL METHOD:** Disposer must comply with federal, state and local laws.

**HANDLING AND STORAGE METHODS:** Store in tight containers to prevent moisture absorption and loss of volatiles.

### **IX. Special Protection Information**

**VENTILATION REQUIREMENTS:** Good mechanical or local in accordance with ACGHI recommendations.

**RESPIRATORY PROTECTION:** Use NIOSH/MSHA approved respirators whenever exposure to vapour or mist is likely. Use self-contained breathing apparatus in high concentration.

**PROTECTIVE CLOTHING:** Clean, body covering clothing, neoprene or PVC gloves.

**EYE PROTECTION:** Splash-proof safety glasses.

**ADDITIONAL PROTECTIVE MEASURES:** Practice good caution and personal cleanliness to avoid skin contact. Avoid breathing vapours of heated materials.

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## **IX. Special Precautions**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Avoid contact with eyes or prolonged contact with skin. Avoid repeated or prolonged inhalation of vapours. Do not let the hardener have contact with acids, oxidising materials such as methylene chloride – it can react violently. Whilst reactions with these chemicals may be slow initially, external heating or self-heating can result in rapid temperature increases and serious hazards. If such reactions take place in a closed waste drum with no pressure release, the drum could expand and rupture.

## **X. Transportation Information**

**DOT N.O.S. DESCRIPTION:** (Di(aminopropyl)ether of Diethylene Glycol)

**DOT HAZARD CLASS:** Corrosive Liquid, N.O.S. UN1760

**DOT HM 181 DESCRIPTION:** Corrosive Liquid (Di(aminopropyl) Ether of Diethylene Glycol), 8, PGIII.

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