

SAFETY DATA SHEET

Issue Date 14-Aug-2017

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Version 1

Section 1: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product identifier

Epoxy Doming Resin Base

Product Name :

Epoxy Doming Resin Base

Description

Light yellow liquid

Other means of identification

UN Number 3082

Recommended use of the chemical and restrictions on use

As a resin base

Details of the supplier of the safety data sheet

Manufacturer

Norski Holdings Ltd
10 Northpoint Street
Plimmerton
Wellington 5247
New Zealand

For further information, please contact

Contact Point +64 (04) 233 6184
E-mail address Enquiries@norski.co.nz

Emergency telephone number

Emergency Telephone +64 0800 500 341

Section 2: HAZARD(S) IDENTIFICATION

Regulatory information

EPA New Zealand HSNO approval code or group standard HSR003180

Dangerous Goods Class

9 PG III

GHS Classification and HSNO Classification

HSNO Hazard Class

| | | Category |
|--|---|-----------------|
| 6.3A(Causes skin irritation) | SKIN CORROSION/IRRITATION | Category 2 |
| 6.4A(Causes eye irritation) | SERIOUS EYE DAMAGE/ EYE IRRITATION | Category 2A |
| 6.5B(May cause an allergic skin reaction) | SKIN SENSITIZATION | Category 1 |
| 6.9B(May cause damage to lungs on repeated exposure) | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] | Category 3 |
| | SPECIFIC TARGET ORGAN TOXICITY (REPEATED [skin,]) | Category 1 |
| | AQUATIC TOXICITY (ACUTE) | Category 2 |
| 9.1B(Toxic to aquatic life with long lasting effects) | AQUATIC TOXICITY (CHRONIC) | Category 2 |

Label elements

GHS label elements

Signal word Danger

Hazard statements H315 - Causes skin irritation. H319 - Causes serious eye irritation. H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation. H372 - Causes damage to organs through prolonged or repeated exposure: skin, H411 - Toxic to aquatic life with long lasting effects.

Symbols





Precautionary Statements - Prevention

Wear protective gloves. Wear eye/face protection. Use only outdoors or in well-ventilated area. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements – Response

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

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

IF ON SKIN: Take off contaminated clothing and wash before re-use. Wash with plenty of soap and water. If skin irritation or rash occurs, seek medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. Wash hands after handling. Collect spillage.

Precautionary Statements – Storage

Store locked up.

Precautionary Statements – Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

See section 11 for more detailed information on health effects and symptoms.

Section 3: COMPOSITION AND INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

| <u>Chemical Name</u> | <u>CAS No</u> | <u>Weight-%</u> |
|---|---------------|-----------------|
| 4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer | 25068-38-6 | 100% |

Section 4: FIRST AID MEASURES

Description of first aid measures

| | |
|---|---|
| General advice | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. |
| Emergency telephone number | Poisons Information Centre, New Zealand: 0800 764 766 |
| Inhalation | Remove to fresh air. IF exposed or concerned: Get medical advice/attention. |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Treat symptomatically. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a doctor. |
| Self-protection of the first aider | Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. |

Most important symptoms and effects, both acute and delayed

Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Symptoms

Indication of any immediate treatment needed medical attention and special instructions

Treat symptomatically

Note to doctors

Nil

Section 5: FIREFIGHTING MEASURES

Flammability of the Product

In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Extinguishing media

Suitable

Dry Chemical water spray or foam

Hazardous combustion products

No Specific Data

Special exposure hazards Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Hazchem Code 3WE

| |
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| Section 6: ACCIDENTAL RELEASE MEASURES |
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Personal precautions No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental Precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Large spill Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7: HANDLING AND STORAGE

Handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Recommended monitoring

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before using. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Material of gloves for long term application (BTT>480min):

- neoprene
- ethyl vinyl alcohol laminate (EVAL)
- polyvinyl chloride (PVC)
- nitrile rubber



EPOXIES • RESINS • GLUES • FILLERS

- butyl rubber
- gauntlet type

Material of gloves for short term/splash application (10min<BTT<480min):

- neoprene
- ethyl vinyl alcohol laminate (EVAL)
- polyvinyl chloride (PVC)
- nitrile rubber
- butyl rubber
- gauntlet type

Eyes

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental Exposure Controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

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| Physical state | : Liquid |
| Color | : Light yellow |
| Odour | : Not determined |
| Odour threshold | : Not determined |
| pH | : Estimated. 7 |
| Melting Point | : Not determined |
| Initial boiling point and boiling range | : Greater than 200 °C (392 °F) |
| Flash point | : Greater than 150 °C (302 °F) |
| Evaporation rate | : Not determined |
| Flammability | : Non-flammable. |
| Explosion limits | |
| Upper: | : Not determined |
| Lower: | : Not determined |
| Vapor pressure | : Less than 0,01 Pa @20 °C (68 °F) |
| Vapor density | : Not determined |
| Relative density | : Not determined |
| Solubility | : Estimated. 0,009 kg/m3 @23 °C (73 °F) |
| Partition coefficient: n-octanol/water | : LogPow 3 |
| Auto-ignition temperature | : Greater than 300 °C (572 °F) |
| Decomposition temperature | : Not determined |



Viscosity

: Kinematic-Not determined
Dynamic- 12 - 14 Pa·s @25 °C (77 °F)

Other information

Not applicable.

Section 10: STABILITY AND REACTIVITY

| | |
|-------------------------------|-----------------------------------|
| Chemical stability | The product is stable. |
| Conditions to avoid | Avoid release to the environment. |
| Incompatible materials | No specific data |

Explosion data

| | |
|----------------------------------|----------------|
| Sensitivity to Mechanical Impact | Not Applicable |
| Sensitivity to Static Discharge | |

Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11: TOXICOLOGICAL INFORMATION

Most important health effects & Potential acute health effects

| | |
|---------------------|--|
| Inhalation | May cause respiratory irritation. |
| Ingestion | Irritating to mouth, throat and stomach. |
| Skin Contact | Causes skin irritation. May cause an allergic skin reaction. |
| Eye Contact | Causes serious eye irritation |

Potential chronic health effects

| | |
|------------------------|---|
| General | Causes damage to organs through prolonged or repeated exposure. |
| Inhalation | No known significant effects or critical hazards. |
| Ingestion | No known significant effects or critical hazards. |
| Skin contact | Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
| Eye contact | No known significant effects or critical hazards. |
| Carcinogenicity | No known significant effects or critical hazards. |

| | | |
|------------------------------|---|---|
| Mutagenicity | : | No known significant effects or critical hazards. |
| Teratogenicity | : | No known significant effects or critical hazards. |
| Developmental effects | : | No known significant effects or critical hazards. |
| Fertility effects | : | No known significant effects or critical hazards. |

Symptoms related to the physical, chemical and toxicological characteristics

- Inhalation** : Adverse symptoms may include the following: respiratory tract irritation, coughing,
- Ingestion** : No specific data.
- Skin contact** : Adverse symptoms may include the following: irritation, redness,
- Eye contact** : Adverse symptoms may include the following: pain or irritation, watering, redness,

Acute toxicity

Hazardous ingredient name

| | | | |
|---|-------------|-----|---------------|
| 4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer | | | |
| | LD50 Oral | Rat | 30.000 mg/kg |
| | LD50 Dermal | Rat | > 1.200 mg/kg |

Other Toxicological Information

Carcinogenicity

Classification

Hazardous ingredient name

| | | |
|---|-------|----------------|
| 4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer | | |
| | ACGIH | Not classified |
| | IARC | Not classified |
| | NTP | Not listed |
| | OSHA | Not classified |

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Environmental effects

This product shows a low bioaccumulation potential. This material is toxic to aquatic life with long lasting effects.

Other adverse effects

No known significant effects or critical hazards

Section 13: DISPOSAL CONSIDERATIONS

Waste disposal

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Avoid dispersal of spilled material and runoff along with contact with soil, waterways drains and sewers.

Section 14: TRANSPORT INFORMATION

Road transport

| | |
|--------------------------------------|--|
| UN Number | 3082 |
| Proper shipping name | Environmentally Hazardous Substance |
| Description | Liquid NOS Contains Liquid Epoxy Resin |
| Hazard Class | 9 |
| Packing Group | III |
| Environmental hazard | N/A |
| Special Precautions for users | N/A |
| Hazchem code | 3WE |
| IERG | N/A |

IMDG

| | |
|--------------------------------------|--|
| UN/ID no | 3082 |
| Proper shipping name | Environmentally Hazardous Substance |
| Description | Liquid NOS Contains Liquid Epoxy Resin |
| Hazard Class | 9 |
| Packing Group | III |
| EmS-No | |
| Special Precautions for users | |
| Marine pollutant | YES |

Transport in Bulk According to Annex II of MARPOL and the IBC CODE

IATA

| | |
|-----------------------------|--|
| UN/ID no | 3082 |
| Proper shipping name | Environmentally Hazardous Substance |
| Description | Liquid NOS Contains Liquid Epoxy Resin |
| Hazard Class | 9 |
| Packing Group | III |
| ERG Code | n/a |

Section 15: REGULATORY INFORMATION

National regulations

The following regulations, rules or standards set forth the requirement for the use, handling, storage, transportation, classification and labeling of chemical product.

Labels for Packages of Dangerous Goods (GB 190-1990)

List of Dangerous Goods (GB 12268-2005)

Classification and Code of Dangerous Goods (GB 6944-2005)

General Rule for Classification and Hazard Communication of Chemicals (GB 13690-2009) General Rules for

Preparation of Precautionary Label for Chemicals (GB 15258-2009) Regulation of Safety Use Chemicals at

Workplace, Decree No. 423 of MOL

Regulations on the Safety Administration of Dangerous Chemicals, 26 January 2002 by State Council Regulations on Labor Protection in Workplaces Where Toxic Products Are Used, Decree No.352 of State Council, 2002

Treat and dispose of the waste in compliance with the applicable environmental protection and waste disposal legislation.

International regulations

Chemical inventories

Australia inventory (AICS) This material is listed or exempted.

Canada inventory This material is listed or exempted.

Japan inventory This material is listed or exempted.

China inventory (IECSC) This material is listed or exempted.

Korea inventory This material is listed or exempted.



New Zealand Inventory (NZIoC) This material is listed or exempted.
Philippines inventory (PICCS) This material is listed or exempted.
United States inventory (TSCA 8b) This material is listed or exempted.
New Zealand

HSNO Approval Number HSR003180

Classification: As per section 2

| |
|---|
| Section 16: ANY OTHER RELEVANT INFORMATION |
|---|

Revision Date 14-Aug-2017

Revision Note New Format

Key or legend to abbreviations and acronyms used in the safety data sheet

Disclaimer

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End of Safety Data Sheet