

# SAFETY DATA SHEET

Issue Date February 2019

## Section 1: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

**Product identifier**

**Product Name** EPOXY CARBORUNDUM BASE

**Description** RESIN PASTE

Other means of identification

**UN Number 3082 Environmentally Hazardous Liquid NOS.**

**Recommended use of the chemical and restrictions on use**

**RECOMMENDED USE** CONSTRUCTION OF EQUIPMENT AND FITTINGS, especially useful when applied to surfaces that are subjected to being dragged across the ground.

**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**

Norski Holdings Ltd  
+64 (04) 233 6184

**E-mail address**

Enquiries@norski.co.nz

Emergency telephone number

**Emergency Telephone**

0800 500 341

## Section 2: HAZARD(S) IDENTIFICATION

**Regulatory information**

**EPA New Zealand HSNO Approval Code or Group Standard**

**HSR002670 the Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2017**

**DANGEROUS GOODS CLASS 9 PACKING GROUP III**

## GHS and HSNO CLASSIFICATIONS

Acutely Toxic (Oral, Dermal and Inhalation)	Category 4 (HSNO-6.1D)
Skin Corrosion/Irritation	Category 2 (HSNO - 6.3A)
Serious Eye Damage/Eye Irritation	Category 2A (HSNO – 6.4A)
Skin Sensitisation	Category 1 (HSNO -6.5B)
Specific Target Organ Repeated Exposure (Lungs)	Category 1 (HSNO 6.9A)
Chronic Aquatic Toxicity	Category 2 (HSNO - 9.1B)

## Signal Word

**DANGER**



## Hazard statements

- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.
- H372 May cause damage to organs through long and repeated exposure
- H411 Toxic to aquatic life with long lasting effects.

## Precautionary Statements – Prevention

- P261 Do not breathe mist/vapours/spray.
- P264 Wash hands thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

## Precautionary Statements – Response

- P301 + P312 IF SWALLOWED:** Call a POISON CENTER or doctor/physician if you feel unwell.
- P330** Rinse mouth.
- P302 + P352 IF ON SKIN:** Wash with plenty of soap and water.
- P333 + P313** If skin irritation or rash occurs: Get medical advice/attention.
- 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.
- P337 + P313** If eye irritation persists: Get medical advice/attention.
- P312** Call a POISON CENTER or doctor/physician if you feel unwell.
- P321** Specific treatment (see First Aid Measures below)
- P363** Wash contaminated clothing before reuse.
- P391** Collect spillage

## Precautionary Statements – Storage

- P405** Store Locked Up.

## Precautionary Statements – Disposal

- P501** In NZ Dispose of in Accordance with EPA and Local Authority/Regional Council Requirements.

### Section 3: COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	CAS no.	Weight %
Bisphenol A/ epichlorohydrin resin	25085-99-8	35-45
Formaldehyde, polymer with (chloromethyl)oxirane and phenol	9003-36-5	2-6%
<b>4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer</b>	<b>5068-38-6</b>	<b>35-45%</b>

### Section 4: FIRST AID MEASURES

- Inhalation** Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.
- Skin Contact** Remove contaminated clothing/shoes and wipe excess from skin. Flush skin with water. Follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned. Contaminated leather articles, including shoes,

cannot be decontaminated and should be destroyed to prevent reuse.

Eye contact	Flush eyes with plenty of water for 15 minutes while holding eyelids open. Get medical attention.
Ingestion Treatment	Do not induce vomiting. Rinse mouth with water. Give plenty of water to drink. Treat symptomatically

## Section 5: FIREFIGHTING MEASURES

Extinguishing Media	Use water fog, foam, dry chemical or carbon dioxide.
Extinguishing Media to Avoid	Do not use direct water stream. May spread fire
Hazardous Combustion Products	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Phenolics. Carbon monoxide. Carbon dioxide.
Unusual Fire and Explosion Hazards	Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is emitted when burned without sufficient oxygen.
Fire Fighting Procedures	Clear fire area of all non-emergency personnel. Isolate fire and deny unnecessary entry. Cool fire exposed containers with water. Irritating fumes are released in fire situations. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Do not allow material or run-off to enter waterways. Stay upwind, keep out of low areas.
Fire-fighting equipment	Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves).

Avoid contact with this material during firefighting operations. If contact is likely, change to full chemical resistant firefighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location

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## Section 6: ACCIDENTAL RELEASE MEASURES

### 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 Spills

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 Spills

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 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

### **Workplace Exposure Standards    None established**

**Engineering**      Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants as low as possible and/or below any recommended or statutory limits. Use explosion-proof ventilation equipment.

**Personal Respiratory** - Use a properly fitted, air-purifying or air-fed respirator complying with New Zealand or EU standards if a risk assessment indicates this is necessary.

### **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.

Recommended: polyvinyl alcohol (PVA), Butyl rubber, EVAL, Neoprene.

### **EYES**

Safety eyewear complying with a New Zealand or EU Standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

This product is a cream paste once liquid constituents are combined.

<b>Flash point</b>	:	Greater than 150 °C (302 °F)
<b>Evaporation rate</b>	:	Not determined
<b>Flammability</b>	:	Non-flammable.
<b>Explosion limits</b>		
<b>Upper:</b>	:	Not determined
<b>Lower:</b>	:	Not determined
<b>Vapor pressure</b>	:	Less than 0,01 Pa @20 °C (68 °F )
<b>Vapor density</b>	:	Not determined
<b>Relative density</b>	:	Not determined
<b>Solubility</b>	:	Estimated. 0,009 kg/m <sup>3</sup> @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)

**Section 10: STABILITY AND REACTIVITY**

Chemical Stability	Stable under recommended storage conditions.
Conditions to avoid	Avoid temperatures above 300°C. Potentially violent decomposition can occur, causing gas generation and pressure increases in closed systems.
Materials to avoid	Reactive or incompatible with the following materials: <i>oxidizing materials</i> Slightly reactive or incompatible with the following materials: <i>acids, amines, anhydrides, chloroform, chloroform acid.</i>
Hazardous Decomposition	Decomposition products may include the following materials: carbon oxides, phenolics and water.

**Section 11: TOXICOLOGICAL INFORMATION**

**Potential Health effects**

**CAUSES DAMAGE TO BODY ORGANS THROUGH PROLONGED OR REPEATED CONTACT.**

- Inhalation**    Vapours are unlikely due to physical properties.
- Ingestion**    Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.
- Skin**            Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Eye**             May cause eye irritation. Corneal injury is unlikely.

**Acute Health Effects  
(Bisphenol A/ epichlorohydrin resin)**

Test	Species	Result	Exposure
LD50 Oral	Rat	>5000mg/kg	-
LD50	Rabbit	20,000mg/kg	-

## Dermal

### Acute toxicity

#### Hazardous ingredient name

4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer

LD50 Oral	Rat	30.000 mg/kg
LD50 Dermal	Rat	> 1.200 mg/kg

## Systemic Effects

### Carcinogenicity

### Mutagenicity

Except for Skin sensitization, repeated exposure is not likely to cause significant adverse effects.

IARC has classified DGEBCA as non-carcinogenic.

In animal studies, did not cause birth defects or other adverse effects on the fetus when pregnant rabbits, did not interfere with reproduction. Animal genetic toxicity studies were negative.

<b>Section 12: ECOLOGICAL INFORMATION</b>
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### Bisphenol A/ epichlorohydrin resin)

**Ecotoxicity** Material is moderately toxic to aquatic organisms on an acute basis

	Species	Period	Result
LC50	fathead minnow	96 h	3.1 mg/l
EC50	water flea	48 h	1.4 - 1.7 mg/l
IC50	bacteria	18 h	> 42.6 mg/l

### Degradability

### Bioaccumulation



**HSNO**

**Classification**

Under OECD guidelines this material cannot be considered as readily degradable.

**Moderate**

**Log Pow = 3 - 5**

**9.1B Very ecotoxic in the aquatic environment**

This material including 4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer is toxic to aquatic life with long lasting effects.

**Section 13: DISPOSAL CONSIDERATIONS**

Dispose of Product in Accordance with Local Authority and Regional Requirements. EPA and WorkSafe New Zealand requirements must also be met.

**Section 14: TRANSPORT INFORMATION**

Regulatory information	UN/NA number	Proper shipping name	Classes/*PG	Additional information
NZS 5433 Land Transport	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.contains (LIQUID EPOXY RESIN)	Class 9 III	
IMO/IMDG	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. contains (LIQUID EPOXY RESIN, LIQUID EPOXY RESIN)	Class 9 III	
IATA (Cargo)	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. contains (LIQUID EPOXY RESIN)	Class 9 III	



## Section 15: REGULATORY INFORMATION

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **New Zealand**

The Person in Control of a Business Unit must ensure that the requirements of Regulations 15-20 of the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016 relating to Personal Protective Equipment are met with regards to all those who work with the Epoxy Carborundum Base.

The Person in Control of a Business Unit must also comply with the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016 as they cover Risk Management, First Aid Equipment including Eye Wash, Training, Emergency Management, Health and Exposure Monitoring and provision of Information for Epoxy Carborundum Base.

After June 2018 the Person in Control of a Business Unit must ensure that the Training Provisions of Regulation 4.5 of the Health and Safety at Work (Hazardous Substances) Regulations 2017 are met in relation to Epoxy Carborundum Base.

The Group Standard applying Disposal, Labelling, Packaging and Safety Data Sheet requirements to this product and HSNO Approval Number is the Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2017 HSR 002670. Prior to 1 December 2017 all Site and Storage Controls relevant to Epoxy Carborundum Base were contained in this Group Standard.

## Section 16: ANY OTHER RELEVANT INFORMATION

**Revision Date February 2019**

**Revision Note                      New Format**

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

### Disclaimer

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**End of Safety Data Sheet**