

SAFETY DATA SHEET

Issue Date February 2019

Section 1: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product identifier

Product Name: Epoxy Carborundum Hardener

Description Slightly Blue/Green Alkaline Putty

Other means of identification

UN Number The Hardener is not classified for Transport under NZS 5433 Transport of Dangerous Goods on Land. No UN Number required.

Recommended use of the chemical and restrictions on use

Recommended Use Construction and Home Maintenance. Ideal product for surfaces that get dragged along the ground, such as the bottom of small boats, kayaks, etc

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 Not required as non-hazardous for Transport

GHS and HSNO CLASSIFICATIONS

Suspected Human Mutagen	Category 2 (HSNO – 6.6B)
Reproductive Toxicity	Category 2 (HSNO - 6.8B)
Specific Target Organ Toxicity (Repeated Exposure)	Category 2 (HSNO - 6.9B)
Specific Target Organ Toxicity (Single Exposure)	Category 2 (HSNO - 6.9B)
Skin Corrosion/Irritation	Category 2 (HSNO - 6.3A)
Serious Eye Damage/Eye Irritation	Category 1 (HSNO – 8.3A)
Skin Sensitisation	Category 1 (HSNO -6.5B)
Chronic Aquatic Toxicity	Category 2 (HSNO - 9.1B)

GHS Pictograms



Label elements

Signal word

DANGER

Hazard Statements

H312: Harmful in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H341: Suspected of causing genetic defects

H361 Suspected of damaging fertility or the unborn child

H373: May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to Aquatic Life with long lasting impacts

Precautionary Statements – Prevention

P102 Keep out of reach of Children

P103 Read Label Before Use

P104 Read Safety Data Sheet Before Use

P202 Do not handle until all Safety precautions read and understood

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection

P281: Use personal protective equipment as required

Precautionary Statements – Response

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

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 CENTRE/doctor.

Precautionary Statements – Storage

P 405 Store Locked up

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Section 3: COMPOSITION AND INFORMATION ON INGREDIENTS
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Components	Chemical formula	CAS Number	Concentration (Weight)
Teta, reaction products with phenol / formaldehyde	(C ₆ H ₁₈ N ₄ .C ₆ H ₆ O.CH ₂ O) _x	32610-77-8	3.8%
Triethylenetetramine	C ₆ H ₁₈ N ₄	112-24-3	5.34%
Phenol	C ₆ H ₆ O	108-95-2	1.31%
Polymer of C-18 unsaturated fatty acid dimers with teta and tofa	C ₆ H ₁₈ N ₄	6082-29-1	34.2%

Section 4: FIRST AID MEASURES

Description of first aid measures

General Advice	Seek medical advice. If breathing has stopped or is labored give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.
Emergency telephone number	Poisons Information Centre, New Zealand: 0800 764 766
Inhalation	If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.
Skin Contact	Wash off immediately with plenty of water for at least 20 minutes. Immediately remove contaminated clothing and any extraneous chemical, if possible to do so without delay. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.
Eye Contact	Rinse immediately with plenty of water also under the eyelids for at least 20 minutes. Remove contact lenses
Ingestion	Do Not Induce Vomiting. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Prevent aspiration of vomit. Turn victim's head to the side.
Self-protection of the first aider	Turn off any ignition sources. 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 and eyes
Symptoms	Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat.
<u>Indication of any immediate treatment needed</u>	Treat symptomatically

Section 5: FIREFIGHTING MEASURES

Suitable Extinguishing Media

Alcohol-resistant foam.
Carbon dioxide (CO₂).
Dry chemical.
Dry sand.
Limestone powder.

Specific hazards :

May generate ammonia gas. May generate toxic nitrogen oxide gases. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces noxious and toxic fumes.

Special protective actions for fire-fighters

Use personal protective equipment. Wear self-contained breathing Apparatus and chemical Protective Clothing for fire fighting if necessary.

Hazchem Code 3WE

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

If in liquid form use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

Environmental precautions

Refer to protective measures listed in Sections 7 and 8. If in liquid form, prevent further leakage or spillage if safe to do so. Prevent product from entering drains through bunding and dykes.

Methods and material for containment and cleaning up

If in liquid form Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapour suppressing foam may be used to reduce vapours. Dam far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to appropriate containers for later disposal.

Methods for cleaning up

Take action to prevent static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

Precautions to prevent secondary hazards

Prevention of secondary hazards

Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections

See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Eye wash stations should be readily accessible. Avoid contact with eyes. Use only in well-ventilated areas. Avoid breathing vapours and/or aerosols. Use personal protective equipment. When using, do not eat, drink or smoke.

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e. pilot lights, electric motors and static electricity). Keep in properly labelled containers.

Incompatible materials

Organic acids (e.g. acetic acid, citric acid etc.)

Mineral acids.

Aldehydes

Reactive metals (e.g. sodium, calcium, zinc etc.)

Materials reactive with hydroxyl compounds.

CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.

Nitrous acid and other nitrosating agents.



Oxidizing agents.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Measures

Provide readily accessible eye wash stations and safety showers.

Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Personal protective equipment

Respiratory Protection.

Wear appropriate respirator suitable for phenol based product when ventilation is inadequate.

Hand protection:

Neoprene gloves.

PVC disposable gloves

Butyl-rubber

Nitrile rubber.

Impervious gloves.

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.

Eye Protection :

Chemical resistant goggles must be worn.

Skin and body protection

Long sleeve shirts and trousers without cuffs.

Special instructions for protection and hygiene :

Discard contaminated leather articles. Provide readily accessible eye wash stations and safety showers. Wash hands at the end of each workshift and before eating, smoking or using the toilet. Provide readily accessible eye wash stations and safety showers.

Exposure limit(s)

Phenol	Time Weighted Average (TWA): EH40 WEL	2 ppm-
Phenol	Time Weighted Average (TWA): EU ELV	2 ppm7.8 mg/m3
Phenol	Time Weighted Average (TWA): EH40 WEL	2 ppm7.8 mg/m3
Phenol mg/m3	Short Term Exposure Limit (STEL): EH40 WEL	4 ppm16

Section 9: PHYSICAL AND CHEMICAL PROPERTIES
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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :	Blue/Green sandy mixture
Odor :	Ammonia
Odor threshold :	No data available.
pH :	10
Melting point/range :	No data available.
Boiling point/range :	> 446 °F (> 230 °C)
Flash point :	> 276 °F (135.56 °C)
Evaporation rate :	No data available.
Flammability (solid, gas) :	Not applicable
Upper/lower explosion/flammability limit :	Not applicable
Vapor pressure :	< 1.00 mmHg at 70°F (21 °C)
Water solubility :	No Data Available
Relative vapor density :	Not applicable
Relative density :	1.08 (water = 1)
Partition coefficient(n- octanol/water) :	No data available.
Auto-ignition temperature :	No data available.
Decomposition temperature :	No data available.
Viscosity :	No data available.
Molecular Weight :	No data available.
Density:	No data available

Section 10: STABILITY AND REACTIVITY

Chemical Stability :

Stable under normal conditions.

Reactivity/Incompatible Materials :

Organic acids (e.g. acetic acid, citric acid etc.)

Mineral acids.

Aldehydes

Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.

Reactive metals (e.g. sodium, calcium, zinc etc.)

Materials reactive with hydroxyl compounds

CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Nitrous acid and other nitrosating agents. Oxidizing agents.

Hazardous Decomposition Products :

Nitric acid.

Ammonia

Nitrogen oxides (NO_x).

Nitrogen oxide can react with water vapors to form corrosive nitric acid.

Carbon monoxide.

Carbon dioxide (CO₂).

Aldehydes

Nitrosamine.

Section 11: TOXICOLOGICAL INFORMATION

Likely routes of exposure

Effects on Eye : **Severe eye corrosion**

Effects on Skin : **Causes skin irritation and skin sensitisation.**

Inhalation Effects **May cause nose, throat and lung irritation. Inhalation of vapours and/or aerosols in high concentration, may cause irritation of respiratory system.**

Ingestion Effects : **No data available.**

Symptoms : **Repeated and/or prolonged exposure to low concentrations of vapours and/or aerosols may cause: Sore throat.**

Acute toxicity

Acute Oral Toxicity **LD50 : > 2,200 mg/kg** **Species : Rat.**

Inhalation : **No data is available on the product itself.**

Acute Dermal Toxicity :

LD50 : > 1,000 mg/kg
Species : Rabbit. Method: Calculation.

Skin corrosion/irritation **Moderate skin irritation.**

Serious eye damage/eye irritation **Serious Eye Corrosion.**

Sensitisation **Known Skin Sensitiser.**

Chronic Toxicity or Effects From Long Term Exposures

Carcinogenicity	No data available
Reproductive Toxicity	1% phenol is a Suspected Reproductive Toxicant
Germ Cell Mutagenicity	Results from a battery of short term genotoxicity tests on this material or its components indicate mutagenic activity.
Specific target organ systemic toxicity (single exposure) :	Respiratory system., Skin., Eyes., Kidney., Liver., Pancreas., Spleen.
Specific target organ systemic toxicity (repeated exposure)	Absorption of phenolic solutions through the skin may be very rapid and can cause damage to the kidneys, liver, pancreas and spleen, and edema of the lungs.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity effects

Aquatic toxicity :

Epoxy Carborndum Hardener has 9.1B HSNO Classification. Toxic with lasting impacts.

Toxicity to daphnia: Components Phenol : EC50 (48 h) : 4 – 7 mg/l

Toxicity to other organisms: No Data Available.

Unsaturated Fats also likely to be Toxic to Aquatic Environment.

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

Road transport

This Product is non - hazardous for Land Transport.

IMDG

This product is non -hazardous for Sea Transport.

IATA

This product is non -hazardous for Air Transport.

Section 15: REGULATORY INFORMATION

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

New Zealand.

1000 kg of Epoxy Carborundum Hardener requires Signage under Regulation 2.5(1) of the Health and Safety at Work (Hazardous Substances) Regulations 2017 due to the 8.3A Classification.

10,000 kg of Epoxy Carborundum Hardener requires an Emergency Plan under Regulation 5.6 of the Health and Safety at Work (Hazardous Substances) Regulations 2017 due to the 8.3A Classification.

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 Hardener.

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 Hardener.

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 Hardener.

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 Hardener 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

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End of Safety Data Sheet