



MATERIAL SAFETY DATA SHEET

NORSTIK EPOXY GLUE HARDENER

Effective Date : June 2017

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Norski Holdings urges the customer receiving this Material Safety Data Sheet to study it carefully to become aware of hazards, if any, of the product involved. In the interests of safety, you should, (1) notify your employees, agents, and contractors, of the information on this sheet; (2) furnish a copy to each of your customers for the product; (3) request your customers to inform their employees and customers as well.

I. Identification

MANUFACTURER: Norski Holdings Ltd, 10 Northpoint Street, Plimmerton, 5024 New Zealand **PRODUCT NAME:** Norstik Epoxy Glue Hardener

CHEMICAL COMPOSITION: Fatty acid, amine condensed polymer paste **FORMULA:** Not available

MOLECULAR WEIGHT: Not known

SYNONYMS: Not applicable

HAZARD CLASS: Not Established, hazard labels not required **UN NO:** Not Classified

PROPER SHIPPING NAME: Epoxy Glue Hardener

COMMON NAME: Epoxy Glue Hardener

HAZCHEM: Not Established

PACKING GROUP: Not Classified

ADDITIONAL INFORMATION: Slightly alkaline paste which will slowly decompose with acids and oxidising agents. **CAS NO:** Not applicable

CAS NAME: Not applicable

HSNO APPROVED CODE: HSR002670

HSNO CLASSIFICATIONS: 6.5B, 8.3A

II. Physical Data

BOILING POINT: Not Applicable (760mm Hg)

FREEZING POINT: 5⁰C

SPECIFIC GRAVITY: (H₂O + 1) 1.00 ±2%

VAPOUR PRESSURE: (@ 20⁰C) Not applicable

VAPOUR DENSITY: (AIR = 1) Not Applicable

SOLUBILITY IN WATER: (% BY WEIGHT @ 200C) Slightly miscible

APPEARANCE & ODOUR: Amber translucent liquid with ammonia odour

EVAPORATION RATE: (BUTYL ACETATE = 1) Not Applicable

III. Ingredients

MATERIAL: Mixture of fatty acids, amines %: 92 ± 0.20 w/w

TLV HAZARD: See TLV and source

IV. Fire & Explosion Hazard Data

FLASH POINT: Greater than 150°C

FLAMMABLE LIMITS (IN AIR % BY VOLUME): LOWER: No Data; **UPPER:** No Data

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EXTINGUISHING MEDIA: Carbon, Dioxide, Dry Chemical Powder, Alcohol Resistant Foam, Smothering Media, Water Fog (Do not use Water Jet).

SPECIAL FIRE FIGHTING PROCEDURES: Not classified as flammable but will char and emit decomposition products. Wear proper self contained respirator.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

V. Health Hazard Data

TLV AND SOURCE: No TLV established. No occupational exposure limit can be established. When used in conjunction with KNLR, treat as per TLV exposure limits for that product.

ACUTE EFFECTS OF OVER-EXPOSURE: To be studied in conjunction with MSDS : Epoxy Glue Base.

SWALLOWING: No acute toxicity data available. Not expected to cause health effects. **SKIN ABSORPTION:** No acute toxicity data available.

INHALATION: No acute toxicity data available. Not expected to be an inhalation hazard under normal conditions. Vapour at elevated temperatures may cause respiratory irritation.

EYE CONTACT: No acute toxicity data available. Can slightly irritate the eye.

CHRONIC EFFECTS OF OVER-EXPOSURE: No acute toxicity data available. Irritation and sensitization of the skin after prolonged exposure, or repeated contact is possible.

OTHER HEALTH HAZARDS: Norstik Epoxy Glue Hardener can be classified as practically non-toxic orally, and at most, slightly toxic percutaneously. Eye irritation is expected to be, at most moderate. Although expected to be an invitro mutagen, this potential is not expected to be expressed in testing invivo. From the totality of results from skin cancer studies with bisphenol-A resins on laboratory animals, this product is not expected to represent a carcinogenic hazard to mammalian life.

EMERGENCY AND FIRST AID PROCEDURES

SWALLOWING: No specific measures are indicated as Norstik Epoxy Glue Hardener is not expected to cause adverse health effects.

SKIN: Remove contaminated clothing as needed. Wash skin thoroughly with soap and water. If skin irritation occurs, the affected should be removed from all association with solvents, resins, curing agents, and formulated mixtures, and referred to a doctor.

INHALATION: No specific measures are necessary at normal temperatures. Vapour of mixed product at elevated temperatures can cause mild irritation. Remove the affected to fresh air source.

EYES: Do not delay! Flush eyes with copious quantities of fresh water for up to fifteen (15) minutes. Retract eyelids frequently. Seek medical attention immediately!

EMERGENCY: 0800 POISON (764 766)

NOTES TO PHYSICIAN: From the totality of results from skin cancer studies carried out on bisphenol-A resins, this portion of the formulation is not expected to be carcinogenic to laboratory animals. Regular health surveillance should be considered, in view of possible cross sensitization with other resins to analogous compounds cannot be reasonably excluded. If skin sensitization has developed, and a casual relationship has been confirmed, further exposure to this product and analogous compounds should not be allowed.

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VI. Reactivity Data

STABILITY

UNSTABLE:

STABLE: When stored separately in tightly sealed original container.

CONDITIONS TO AVOID: Temperatures above 200-250⁰C. Vigorous polymerization can occur on contact with caustic @ 200⁰C

INCOMPATIBILITY: (MATERIALS TO AVOID) UV light induces a slow oxidation process in the presence of oxygen. Reacts with epoxide resin compounds as curing agents to form cured epoxy resins.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: Norstik Epoxy Glue Hardener may form toxic materials; carbon monoxide, and carbon dioxide.

HAZARDOUS POLYMERIZATION

MAY OCCUR: See INCOMPATIBILITY

WILL NOT OCCUR:

VII. Spill or Leak Procedures

STEPS TO TAKE IF MATERIAL IS RELEASED OR SPILLED: Epoxy Glue Hardener should be shovelled up and placed into an expendable container.

WASTE DISPOSAL METHOD: Dispose of at an approved landfill in accordance with local legislation.

VIII. Special Protection Information

RESPIRATORY PROTECTION: In an inhalation risk exists, wear a full face piece respirator with organic cartridge to NZS 2266. In confined spaces, where the TLV limit may be exceeded, wear self contained positive pressure breathing apparatus to NZS 2209.

VENTILATION: Maintain adequate ventilation, either naturally or by use of extraction equipment.

OTHER PROTECTIVE EQUIPMENT: Wear approved safety goggles, PVC, natural, or nitrile rubber gloves if necessary. The wearing of overalls is recommended. Safety shoes or boots are recommended.

IX. Special Precautions

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: For local transportation within New Zealand, refer to NZS 5433:1988. Store in original container. Keep container closed at all times. Store in a cool well ventilated place, below 25⁰C. Store away from heat, naked flames, and sparks. Store away from direct sunlight. Store away from oxidizing agents, and their vapours.

OTHER PRECAUTIONS Store securely away from children. Keep away from foodstuffs, drink, and washing areas. **ENVIRONMENTAL:**

Epoxy Glue Base can be expected to be moderately toxic to aquatic organisms. Although practically non-toxic to mammalian wildlife, skin and eye irritation can occur. Can be expected to be not readily biodegradable. Prevent contamination of soil and water. Spilled material should be contained and removed.

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