

100SE Epoxy Hardener

1 PRODUCT AND COMPANY IDENTIFICATION

2 HAZARDS IDENTIFICATION

Classification of Substance

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Health, Acute toxicity, 4 Oral
 Health, Acute toxicity, 4 Inhalation
 Health, Skin corrosion/irritation, 1
 Health, Skin sensitization, 1
 Health, Serious Eye Damage/Eye Irritation, 1
 Health, Reproductive toxicity, 1
 Health, Specific target organ toxicity - Repeated exposure, 1
 Environmental, Hazards to the aquatic environment - Acute, 1
 Environmental, Hazards to the aquatic environment - Chronic, 1

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: DANGER

GHS Hazard Pictograms:



GHS Hazard Statements:

H302 - Harmful if swallowed
 H332 - Harmful if inhaled
 H314 - Causes severe skin burns and eye damage
 H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage
 H332 - Harmful if inhaled
 H360 - May damage fertility or the unborn child (state specific effect if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
 H372 - Causes damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
 H400 - Very toxic to aquatic life
 H410 - Very toxic to aquatic life with long lasting effects

GHS Precautionary Statements:

No GHS precautionary statements indicated

3 COMPOSITION/INFORMATION ON INGREDIENTS

CAS#		Chemical Ingredients: % Chemical Name:	
100-51-6	25-35%	Benzyl alcohol	
84852-15-3	15-30%	Phenol, 4-nonyl-, branched	

Inhalation:	Move victim into fresh air. If breathing is labored, administer oxygen. If not breathing, give artificial respiration. Consult a doctor immediately.
Skin Contact:	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Take victim immediately to hospital to obtain medical attention. Wash clothing before reuse. Destroy or thoroughly clean contaminated shoes before reuse.
Eye Contact:	Rinse immediately with plenty of water for 15 minutes and seek advice of an eye specialist/physician. Continuing to rinse eyes during transport to hospital. Do not remove contact lens if worn.
Ingestion:	Rinse out mouth, spit out liquid. Do not induce vomiting and seek medical advice immediately. Never give anything by mouth to an unconscious person.

Flash Point: >93 C (>199 F) TCC
Suitable Extinguishing Media: Water spray, alcohol-resistant foam, CO₂, Dry powder.

Unsuitable Extinguishing Media: High volume water jet

Unusual Fire and Explosion Hazards: Firefighters should wear NFPA approved self-contained breathing apparatus and full protective clothing. Avoid contact with product. Decontaminate equipment and protective clothing prior to re-use. Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

Hazardous Decomposition Products: On combustion, toxic gases, including nitrogen oxides, carbon monoxide, carbon dioxide, tin/tin oxides.

Advice to Firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire including self-contained breathing apparatus and NFPA compliant helmet, hood, boots and gloves. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture. Toxic gases/fumes may be given off during burning or thermal decomposition.

Personnel Precautions: Wear appropriate personal protective equipment. Evacuate surrounding areas and isolate the area. Keep unnecessary and unprotected personnel from entering. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Implement site emergency response plan.

Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform authorities if the product has caused environmental pollution (sewers, drains, waterways or soil).

Methods for containment: Remove all sources of ignition, including flames, heat, and sparks. Stop leak if without risk. Move containers from spill area. Dike or dam spilled material with non-combustible, absorbent material (e.g., sand, earth, vermiculite or diatomaceous earth) and control further spillage, where possible. Make certain that absorbent material soaks up all liquids.

Methods for Clean-up: Cleanup personnel must use appropriate personal protective equipment. Evacuate and keep unnecessary personnel out of spill area.

Handling Precautions:

Handling: Do not breathe vapors or spray mist. Avoid contact with eyes or skin. Avoid contact with clothing. Use only with adequate ventilation and personal protection. Remove contaminated personal protective equipment (PPE), then wash hands and face thoroughly after handling and before eating and drinking. Keep container closed when not in use. Empty containers retain product residue and can be hazardous. Do not get in eyes, on skin or on clothing. Do not ingest. Keep away from heat, sparks, flames and other sources of ignition. Avoid release to the environment. Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination with moisture is suspected. Follow all SDS/label precautions even after container is emptied because it may retain product residues.

Storage Requirements:

Storage: Keep away from food products during use and storage. Storage class (TRGS 510): non-combustible, acute toxic Category 3/toxic hazardous materials or hazardous materials causing chronic effects. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled, unapproved or reactive containers. Use appropriate containment to avoid environmental contamination. Personnel education and training in the safe use and handling of this product are required under OSHA Hazard Communication Standard 29 CFR 1910.1200.

Incompatible Materials or Ignition Sources: Stable under recommended storage conditions. Do not store together with oxidizing and acidic materials. Do not store together with caustic solutions and alkalis. Store away from food stuffs. Avoid water, air humidity, oxidizing agents, cotton waste or other combustible materials. Keep away from sources of ignition - No smoking. Additional guidance on fire and explosion protection may be found in various consensus standards, including NFPA 30, 69 and 77 and API 2003 as well as OSHA regulation 29CFR1910.106.

Engineering Controls:

General dilution and local exhaust as necessary to control airborne vapors, mists, dusts, and thermal decomposition products below appropriate airborne concentration standards and guidelines. A safety shower and eye wash fountain should be readily available. To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination. Curing ovens must be ventilated to prevent the build-up of explosive atmospheres and to prevent off-gases from entering the work place.

Personal Protective Equipment:

Respiratory: In case of inadequate ventilation, wear respiratory protection. 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. Use positive pressure supplied air respirator when airborne concentrations are not known, when airborne levels are 10 times the appropriate TLV, and when spraying is performed or product is applied by aerosol in a confined space or area with limited ventilation. If respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Contact health and safety professional or manufacturer for specific information.

Eye/Face: Use chemical resistant goggles. Chemical safety goggles in combination with a full face shield (8-inch minimum) must be used if a splash hazard exists. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Contact lenses should not be worn.

Hands: Use permeation resistant gloves such as neoprene or nitrile. The glove must be impermeable and resistant to the product/the substance/the preparation. Selection of the glove material does not only depend on the material, but also on its quality and varies from manufacturer to manufacturer. The resistance of the glove material and manufacture must be determined in advance of the application/use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Skin/Body: Wear rubber or plastic apron and permeation resistant clothing, chemical-resistant gloves, and long-sleeved shirts, and pants. Gloves must be inspected prior to use. Remove and wash contaminated clothing before re-use.

General Industrial Hygiene Considerations: Keep away from food and drink. Wash hands and face after use. Educate and train workers in the safe use and handling of this product. Emergency showers and eye wash stations should be available. Follow all label instructions.

Environmental Exposure Controls: Avoid release to the environment. Construct a dike to prevent spreading of spills. 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.

Appearance:	Clear	Solubility:	Water soluble
Physical State:	Viscous liquid	Bulk Density:	N/A
Spec Grav./Density:	1.02 +/- 0.1		
Boiling Point:	N/A		

Reactivity:	N/A
Chemical Stability:	Stable under recommended storage conditions.
Conditions to Avoid:	Avoid oxidizing agents.
Materials to Avoid:	Strong bases, strong oxidizing agents.
Hazardous Decomposition:	Carbon monoxide, carbon dioxide, and nitrogen oxides.
Hazardous Polymerization:	May react with catalysts, oxidizing agents, peroxides, strong alkali and other radical forming substances.

For aliphatic amine:

LD50 Oral Rat 1040 mg/kg (OCED Test Guideline 401)

LC50 Inhalation Rat 2.4 mg/l (4h)

For Benzyl Alcohol:

LD50 Oral Rat 1,230 mg/kg LD50 Rat Inhalation >4.178 mg/l 4 h

LD50 Dermal Rabbit 2,000 mg/kg For Nonyl Phenol:

LD50 Oral Rat 1300 mg/kg

LD50 Inhalation No information available

LD50 Dermal Rabbit 200 mg/kg

Other Information: On the skin: Caustic effect on skin and mucous membranes. On the eye: Strong caustic effect. Sensitization: Sensitization possible through skin contact. Sensitizing effect through inhalation is possible by prolonged and repeated exposure.

CARCINOGENICITY

This product does not contain a component that is classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification: IARC, NTP, and OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen.

REPRODUCTIVE TOXICITY: Presumed human reproductive toxicant.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: For Nonyl Phenol: STOT -single exposure Respiratory System; STOT Repeated exposure Liver, Kidney, Blood.

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: No data available.

ASPIRATION HAZARD: No data available.

ADDITIONAL INFORMATION: RTECS: WH7000000. Nonyl Phenol is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. TO THE BEST OF OUR KNOWLEDGE THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES OF THIS PRODUCT HAVE NOT BEEN THOROUGHLY INVESTIGATED

Toxicity

This product is harmful to the environment. Very toxic to fish and other aquatic life with long-lasting effects.

Persistence and degradability: According to the results of tests of biodegradability, this product is partly biodegradable.

Bioaccumulative potential: Although the product is partly biodegradable, significant residuals remain

Other adverse effects: No data available

Waste Treatment Methods: Dispose in accordance with Federal, State, and Local laws and regulations. The generation of waste should be avoided or minimized wherever possible. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Empty containers should be taken to an approved waste handling site for recycling or disposal. Incineration or landfill should only be considered when recycling is not feasible. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty Container Precautions: Dispose of as unused product. Do not heat or cut container with electric or gas torch. Recondition or dispose of empty container in accordance with governmental laws and regulations. Do not reuse empty container without proper cleaning. Label precautions also apply to this container when empty.

UN2735, Amines, liquid, corrosive, n.o.s. or Polyamines, liquid, corrosive, n.o.s., 8, PG III

This product is in compliance with the inventory listing of the following countries: Australia (AICS) Japan (MITI) Korea (KECI) Philippines (PICCS) China listed/registered listed/registered listed/registered listed/registered listed/registered US Federal Regulations U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities: None U.S. - SARA - Section 311/312 Hazard Categories: See Section 2 for more information U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs: None U.S. - CERCLA/SARA - Section 313 - Emissions Reporting: None U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing: None U.S. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) Components: None U.S. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 372.65) Supplier Notification Required Components: None U.S. Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261): Under RCRA it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste.

This product does not contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

State Regulations in United States - California U.S. - California - Proposition 65 - Carcinogens List: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.). U.S. - California - Proposition 65 - Developmental Toxicity: None U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL): None U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL): None U.S. - California - Proposition 65 - Reproductive Toxicity - Female: None U.S. - California - Proposition 65 - Reproductive Toxicity - Male: None Based on information provided by Pflaumer suppliers, this product is considered "DRC Conflict Free" as defined by the SEC Conflict Minerals Final Rule (Release No. 34-67716, File No. S7-40-10, Date 08-22-212).

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Revision Date: [N/A]