

Epoxy

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
according to Canadian Hazardous Products Regulations (HPR)



Epoxy

SECTION 1: IDENTIFICATION

Product Name: ADHESIVE RESIN
Product type: Epoxy resin
Restriction of Use: None identified
IDH number: 702159
Item number: 83176_193035
Region: United States
Company **Contact information:**
BEST Inc Telephone: (897) 797 9250
3603 Edison Place For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident
Rolling Meadows IL Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 CCN4877
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

SECTION 2: Hazards identification

EMERGENCY OVERVIEW

DANGER: COMBUSTIBLE LIQUID.
CAUSES SKIN IRRITATION.
MAY CAUSE AN ALLERGIC SKIN REACTION.
CAUSES SERIOUS EYE IRRITATION.
SUSPECTED OF CAUSING GENETIC DEFECTS.
MAY DAMAGE FERTILITY OR THE UNBORN CHILD.
CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	4
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1
GERM CELL MUTAGENICITY	2
REPRODUCTIVE TOXICITY	1B
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	1

PICTOGRAM(S)



Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat and sparks, open flames, hot surfaces - no smoking. Do not breathe vapors, mist, or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection. Use personal protective equipment as required.

Response: IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

Storage: Store in a well-ventilated place. Keep cool. Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

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Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

SECTION 3: Composition/information on ingredients

Hazardous Component(s)	CAS Number	Percentage*
Epoxy resin	Proprietary	60 – 100
Butyl 2,3-epoxypropyl ether	2426-08-6	10 – 30
Silica, amorphous, fumed, crystal-free	112945-52-5	1 – 5

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

SECTION 4: First aid measures

Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Skin Contact:	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Get medical attention. Wash clothing before reuse.
Eye Contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
Symptoms:	See Section 11.

SECTION 5: Firefighting measures

Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
Unusual fire or explosion hazards:	In case of fire, keep containers cool with water spray. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
Hazardous combustion products:	Oxides of carbon. Irritating organic fragments. Acids. Aldehydes.

SECTION 6: Accidental release measures

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Do not allow product to enter sewer or waterways.
Clean-up methods:	Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during cleanup. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Clean residue with soap and water. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

SECTION 7: Handling and storage

Handling	Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep container closed. Refer to Section 8.
Storage	Store in original container until ready to use. Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Store away from heat, sparks, flames, or other sources of ignition.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

SECTION 8: Exposure controls/personal protection

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Epoxy resin	None	None	None	None
Butyl 2,3-epoxypropyl ether	3 ppm TWA (SKIN)	50 ppm (270 mg/m ³) PEL	None	None
Silica, amorphous, fumed, crystal-free	10 mg/m ³ TWA Inhalable dust. 3 mg/m ³ TWA Respirable fraction.	20 MPPCF TWA 0.8 mg/m ³ TWA	None	None

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Engineering controls:	Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
Respiratory protection:	Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.
Eye/face protection:	Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.
Skin protection:	Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

SECTION 9: Physical and chemical properties

Physical State:	Liquid, Paste
Color:	Milky, white
Odor:	None
Odor threshold	Not available.
pH:	Not applicable
Vapor pressure:	2 mm hg (20 °C (68°F))
Boiling point/range:	140 °C (284°F)
Melting point/ range:	Not available.
Specific gravity:	1.13
Solubility in water:	Not miscible or difficult to mix
Vapor density:	Not available.
Flash point:	81 °C (177.8 °F) Pensky Martens closed cup
Flammable/Explosive limits - lower:	Not available.
Autoignition temperature:	Not available.
Evaporation rate:	Not available.
Flammable/Explosive limits - upper:	Not available.
Partition coefficient (n-octanol/water):	Not available.
VOC content:	0.0 %; 0 g/l (value for resin and hardener together)
Viscosity:	Not available.
Decomposition temperature:	Not available.

SECTION 10: Stability and reactivity

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.
Hazardous decomposition products:	Oxides of carbon. Aldehydes. Acids.
Incompatible materials:	Strong acids. Strong bases. Strong oxidizing agents. Amines. Strong alkalis. Water.
Reactivity:	Not available.
Conditions to avoid:	Avoid temperatures above 38°C (100°F). Excessive heat. Store away from incompatible materials. Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately. Failure to observe these precautions may result in excessive heat build-up causing an exothermic reaction.

SECTION 11: Toxicological information

Relevant routes of exposure:	Skin, Inhalation, Eyes, Ingestion
Potential Health Effects/Symptoms	
Inhalation:	Inhalation of vapors or mists of the product may be irritating to the respiratory system. Coughing. Shortness of breath.
Skin contact:	Causes skin irritation. May cause allergic skin reaction. Itching. Redness.
Eye contact:	Causes serious eye irritation. If left untreated, corneal damage can occur and injury is slow to heal.
Ingestion:	May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Epoxy resin	None	Allergen, Irritant
Butyl 2,3-epoxypropyl ether	Oral LD50 (RAT) = 2,000 mg/kg Oral LD50 (RAT) = 2.05 g/kg Dermal LD50 (RABBIT) = 0.788 g/kg Inhalation LC50 (RAT) = 670 mg/l Inhalation LC50 (RAT, 8 h) = > 670 mg/l	Irritant, Allergen, Central nervous system, Liver, Mutagen
Silica, amorphous, fumed, crystal-free	None	Nuisance dust

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Epoxy resin	No	No	No
Butyl 2,3-epoxypropyl ether	No	No	No
Silica, amorphous, fumed, crystal-free	No	No	No

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SECTION 12: Ecological information

Ecological information: Not available.

SECTION 13: Disposal considerations

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.
Hazardous waste number: Not a RCRA hazardous waste.

SECTION 14: Transport Information

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Combustible liquid, n.o.s. (n-Butyl glycidyl ether)
Hazard class or division: Combustible Liquid
Identification number: NA 1993
Packing group: III

International Air Transportation (ICAO/IATA)

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorhydrin resin)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A Epichlorhydrin resin)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
Marine pollutant: Bisphenol-A Epichlorhydrin resin

SECTION 15: Regulatory information

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification: None above reporting de minimis
CERCLA/SARA Section 302 EHS: None above reporting de minimis
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire
CERCLA/SARA Section 313: None above reporting de minimis
California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

SECTION 16: Other information

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