



MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

PRODUCT NAME: C.E.R. (Clear Epoxy Resin) - Part A	
Manufactured For: DYNACCO INC. P O Box 27 Monroe, WA 98272	Date of Latest Revision: Sept 1, 2012 Common Name: Epoxy Resin Chemical Family: Modified Liquid Epoxy Resin
Telephone: 1-360-794-8974	Health - 1 Flammability - 1 Reactivity - 0
24 Hour Emergency: ChemTel 800-255-3924	

SECTION 2: HAZARDOUS CHEMICALS

CHEMICAL NAME / CAS #	%	APPLICABLE EXPOSURE LIMITS		
		PEL-WISHA/OSHA	TLV-ACGIH	OTHER
Reaction products of Epichlorohydrin and Bisphenol A / 25085-99-8	>70	none established	none established	none established
Cresyl Glycidyl Ether / 2210-79-9	<30	none established	none established	

CARCINOGENIC INGREDIENTS: N/A

SECTION 3: HEALTH HAZARDS

EYES: May cause eye irritation.

SKIN: Prolonged or repeated exposure may cause skin irritation. May cause skin sensitization.

SKIN ABSORPTION: A single prolonged skin exposure is not likely to result in absorption of harmful amount. The dermal LD50 is unknown.

INGESTION: Single dose oral LD50 is unknown. Single dose oral toxicity is expected to be low.

INHALATION: No guide for control established. Single exposure to vapors is not likely to be hazardous. However, exposure to vapors or mists could cause respiratory tract irritation. May possibly cause pulmonary sensitization.

ROUTES OF ENTRY: N/A

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product.

SECTION 4: FIRST AID

EYES: Irrigate immediately with water for at least 15 minutes while holding eyelids open, get medical attention.

SKIN: Wash off in flowing water or shower, follow by washing with soap and water. Remove contaminated clothing and wash before reuse. Use extra care with shoes.

INGESTION: Do not induce vomiting, get medical attention.

INHALATION: Remove to fresh air if effects occur. Provide oxygen if breathing is difficult. Consult medical.

NOTE TO PHYSICIANS: No specific antidotes. Supportive care. Treatment based on judgement of the physician in response to reactions of the patient. If more than 20 ml per kg has been ingested and vomiting has not occurred, emesis should be induced with supervision.

SECTION 5: FIRE AND EXPLOSION DATA

FLASH POINT (method used)	FLAMMABILITY LIMITS	LEL	UEL
>200° F (93° C) (Pensky-Martin Closed Cup)	N/A	N/A	N/A



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EXTINGUISHING MEDIA: Foam, CO₂, dry chemicals

SPECIAL FIRE FIGHTING PROCEDURES: SPECIAL FIRE FIGHTING EQUIPMENT: Wear positive pressure self-contained breathing apparatus during fire fighting.

UNUSUAL FIRE AND EXPLOSION HAZARDS: N/A

HAZARDOUS DECOMPOSITION PRODUCTS: Under conditions of imperfect combustion and/or pyrolysis various phenolic compounds CO and/or CO₂ may be evolved.

HAZARDOUS POLYMERIZATION: Will not occur by itself, but masses of more than one pound of product plus an aliphatic amine will cause irreversible polymerization with heat build up.

SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Soak up in non-reactive absorbent material or scrape up. The residue can be removed with hot, soapy water. Use of methylene chloride, acetone, or aromatic solvents in clean up poses a distinct hazard and therefore should be avoided.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep away from oxidizers, heat, and flames. Keep in cool, dry, ventilated storage and in closed containers preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Keep container closed. Avoid breathing of vapors. Handle in well-ventilated work space.

SECTION 8: PERSONAL PROTECTION AND EXPOSURE CONTROLS

RESPIRATORY PROTECTION: Avoid breathing vapor or mists. Use a NIOSH approved respirator as required to prevent overexposure.

VENTILATION: LOCAL EXHAUST: Good room ventilation usually adequate for most operations. Use ventilation to control vapor concentrations.

PROTECTIVE GLOVES: see below

EYE PROTECTION: Avoid contact with eyes — wear chemical goggles if there is potential contact with eyes.

OTHER PROTECTIVE EQUIPMENT: Clean, body covering clothing. In addition, rubber gloves, boots, aprons, gauntlets, and full face shield depending on the extent and severity of exposure likely.

OTHER ENGINEERING CONTROL: N/A

WORK PRACTICES: Practice caution and good personal cleanliness to avoid skin and eye contact. Avoid breathing vapors of heated material.

HYGIENIC PRACTICES: N/A

SECTION 9: TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (360° F)

SPECIFIC GRAVITY (H₂O=1) 1.12-1.14

VAPOR PRESSURE (mmHG) N/A

PERCENT NONVOLATILE BY VOLUME (100%)

VAPOR DENSITY (AIR=1) N/A

EVAPORATION RATE N/A

SOLUBILITY: N/A

APPEARANCE AND ODOR: Clear, light yellow, or pigmented. Faint epoxy odor.

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable at ambient temperatures.

CONDITIONS TO AVOID (if unstable): BASE. Excess heating over long periods of time degrades the resin.

INCOMPATIBILITY (Materials to avoid): Mineral acids (i.e. sulfuric, phosphoric, etc.), Alkalis (i.e. Sodium or Potassium Hydroxide, etc.), organic acids (i.e. acetic acid, citric acid, etc.), oxidizing agents (i.e. perchlorates,



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nitrites, etc.), Sodium or Calcium Hypochlorite. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. A reaction accompanied by large heat release occurs when the product is mixed with acids. Heat generated may be sufficient to cause vigorous boiling creating a hazard due to splashing or splattering of hot material.

HAZARDOUS DECOMPOSITION PRODUCTS: (from burning, heating or reaction with other materials): Nitrogen oxide can react with water vapors to form corrosive nitric acid (TLV=2 ppm). Carbon monoxide, Carbon dioxide, Nitrogen Oxides & Nitric acid in a fire. Ammonia when heated. Irritating and toxic fumes at elevated temperatures. The oxides of nitrogen gases (except nitrous oxide) emitted on decomposition are highly toxic.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11: TOXICOLOGICAL PROPERTIES

ACUTE ORAL TOXICITY (LD50, RAT): No data

ACUTE DERMAL TOXICITY (LD50, RABBIT): No data

ACUTE INHALATION TOXICITY (LC50, RAT): No data

CHRONIC / SUBCHRONIC DATA: Except for skin sensitization, repeated exposures to low molecular weight epoxies of the type are not anticipated to cause any significant adverse effects. A poorly characterized sample of low molecular weight epoxy resin of the type has been reported to produce skin cancer in highly sensitive strain of mice. However, high levels of impurities compromise the validity of the findings.

SECTION 12: ECOLOGICAL INFORMATION

BIODEGRADABILITY: This section will be updated as ecological reviews are completed.

SECTION 13: DISPOSAL INFORMATION

WASTE DISPOSAL METHOD: Burn in adequate incinerator or bury in approved landfill. Would be a hazardous waste by RCRA criteria (40 CFR 26).

SECTION 14: TRANSPORT INFORMATION

Not regulated for transport.

SECTION 15: REGULATORY INFORMATION

N/A

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information contained herein is based on data believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable regarding all current regulations.

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