

Material Safety Data Sheet

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Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Revision Date: August 29, 2003

Product Name: Epoxy Adhesive Coreactant
Product Number: 1 pack: 115-3302

DISTRIBUTOR: Circuit Technology Center, Inc.
45 Research Drive, Haverhill, MA 01832-1293
Phone: 978-374-5000, Fax: 978-372-5700

Emergency Response 24-Hour Telephone: **CHEMTREC** United States: (800) 424-9300
International: (703) 527-3887 (collect)

Section 2. COMPOSITION, INFORMATION OR INGREDIENTS

CHEMICAL	C.A.S. Number	Weight %
Diethylene triamine	000111-40-0	10-30

Other ingredients (if any) per OSHA 1910.1200 (g)(2)(i)(c)(1) which may compose less than 1% of the composition, and/or which are nonhazardous or not listed on the Massachusetts Hazardous Substance List.

NA 70-90

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

	OSHA PEL	Exposure Limits 8 Hours TWA (PPM)	ACGIH TLV	Ingestion LD50 (rats)	Dermal LD50
Diethylene triamine	NA	4.2mg/M3 (1ppm)	>500mg/kg	1400mg/kg	

Section 3. HAZARD IDENTIFICATION

Emergency Overview:

Potential Health Effects:

GENERAL: Eye or mouth contact may cause serious burns; material is also a strong sensitizer.

NOTE 1: For Industrial Use Only: WARNING: May cause sensitization, irritation, or other allergic responses. Avoid eye and skin contact and prolonged inhalation of vapors.

Routes of entry: Skin, eyes and inhalation.

None of the ingredients in this product are known carcinogens, mutagens, neurotoxins or teratogens.

Section 4. FIRST AID MEASURES

INHALATION: Remove to fresh air.

EYE CONTACT: Flush with water, get medical attention.

SKIN CONTACT: Wash with soap and water; remove contaminated clothing.

INGESTION: No known antidote but give milk or water; DO NOT induce vomiting if swallowed; get medical attention.

Section 5. FIRE-FIGHTING MEASURES

Flash Point & Method: >200°F (setaflash)

Flammable Limits: LEL: NA UEL: NA

Autoignition Temperature: NA

GENERAL HAZARD: Toxic gases may be liberated; handle as combustible; store in a cool place.

FIRE FIGHTING INSTRUCTIONS: Avoid breathing smoke. Addition of water may reduce flame intensity.

HAZARDOUS COMBUSTION PROD.: NA

FLAMMABLE PROPERTIES: NA

EXTINGUISHING MEDIA: Dry chemicals, chemical foam, carbon dioxide, water.

Section 6. ACCIDENTAL RELEASE MEASURES

LAND SPILL: Prevent skin and eye contact. Soak up absorbent material, or scrape up, and transfer to disposal container. Wipe up remaining residue with solvents, observing solvent flammability cautions, or use detergents.

NEUTRALIZING AGENT: NA

Section 7. HANDLING AND STORAGE

STORAGE TEMPERATURE: Ambient

STORAGE PRESSURE: Atmospheric

GENERAL: Store in a cool place in closed containers.

Section 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls:

- (X) Local Exhaust ventilation is recommended.
 - (X) Mechanical ventilation recommended.
 - () Use explosion proof ventilation equipment.
 - () Do not use in confined spaces without mechanical ventilation equipment.
- See section 2 for component exposure guidelines.

Personal Protection:

RESPIRATOR: Air supplied or organic canister, mask in confined areas.

HAND PROTECTION: (X) Protective Gloves Required

EYE PROTECTION: (Use one of the following)

(X) Safety Glasses (X) Chemical Goggles

OTHER RECOMMEND.: (Use all of the following)

(X) Eye Bath (X) Safety Shower

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Density.....	1.1 g/ml	pH.....	NA
Boiling Point.....	>300°F	% Volatile By Volume.....	<1
Freezing Point.....	NA	% Solids.....	NA
Vapor Density (Air = 1).....	>2	Evaporation Rate (BuAc = 1).....	Low
Solubility in Water.....	Partial	Viscosity.....	NA
Molecular Weight.....	NA	Physical State.....	Liquid
Non-Exempt VOC (g/L).....	NA	Odor.....	Ammonia
Appearance: Clear, light amber liquid		Vapor Pressure(mmHg).....	<1

Section 10. STABILITY AND REACTIVITY

GENERAL:

Stable.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Avoid contact with metals corroded by liquid amines and high temperatures. Avoid chlorinated compounds; exotherms when used to cure epoxy resin. Incompatible with strong acids and bases and strong oxidizing agents. CO, CO₂, aldehydes, phenol. Will not occur.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

HAZARDOUS POLYMERIZATION:

Section 11. TOXICOLOGICAL INFORMATION

RESULTS OF COMPONENT TOXICITY TEST PERFORMED: Information not available.

HUMAN EXPERIENCE: Information not available.

Section 12. ECOLOGICAL INFORMATION

FURTHER INFORMATION:

Information not available.

Section 13. DISPOSAL CONSIDERATIONS

RCRA 40 CFR 261 Classification:

Federal, State, and Local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

WASTE DISPOSAL METHOD: Dispose of hazardous waste according to local, state and federal regulations.
Disposal method can be land burial or chemical.

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Section 14. TRANSPORT INFORMATIONDOT, IATA, ICAO, and IMO Description:

Basic Description: NA
Proper Shipping Name: NA
Hazard Class: NA
Packaging Group: NA
UN Number: NA
Label Requirements: NA
Max. Shippable Qty.: NA
Packaging: NA
Reportable Quantity (RQ): NA
1996 NAERG Guide#: NA
Limitations: NA

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Section 15. REGULATORY INFORMATION**UNITED STATES FEDERAL REGULATIONS:**

MSDS complies with OSHA's Hazard Communication Rule, 29 CFR 1910.1200.

CERCLA/SUPERFUND, 40 CFR 117, 302:

--- None of the chemicals are Superfund hazards ---

SARA SUPERFUND AND REAUTHORIZATION ACT OF 1986 TITLE III Sections 302, 311, 312 and 313:

Section 302 - Extremely hazardous substances (40 CFR 355)

--- None of the chemicals are Section 302 hazards ---

Section 311/312 - Material Safety Data Sheet Requirements (40 CFR 370)

() By our hazard evaluation, this product is non-hazardous

(X) By our hazard evaluation, this product is hazardous. It should be reported under the following

EPA hazard:

(X) Immediate (acute) health hazard

(X) Delayed (chronic) chronic health hazard

() Sudden release of pressure hazard

() Reactive Hazard

Section 313 - List of Toxic Chemicals (40 CFC 372)

This product contains the following chemicals (at levels of 1% or greater) which are found on the 313 list of Toxic Chemicals

CHEMICAL

C.A.S. Number

Weight %

TOXIC SUBSTANCE CONTROL ACT (TSCA): All substances are TSCA Listed.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA 40 CFR 261) Subpart C&D:

Refer to Section 11. for RCRA classification.

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FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15
(FORMERLY SECTION 307), 40 CFR 116 (FORMERLY SECTION 311)

This product contains the following chemicals which are listed:

CHEMICAL	C.A.S. Number	Weight %
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CLEAN AIR ACT: --- No Information ---

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:

This product contains the following ingredients which appear on the California proposition 65 list: CHEMI-

CAL	C.A.S. Number	Weight %
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INTERNATIONAL REGULATIONS:

CANADA WHIMS: NA

EUROPE EINECS NUMBERS: NA

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Section 16. OTHER INFORMATION

LABEL INFORMATION:

European risk and Safety Phrases: NA

European Symbols Needed: NA

Canadian WHIMS Symbols: NA

NFPA HAZARD RATING:

(1) Flammability

(2) Health

(0) Reactivity

REVISION DATES, SECTIONS, REVISED BY:

08-OCTOBER-98, J. FORBES

ABBREVIATIONS USED IN THIS DOCUMENT:

NE - Not Established, NA - Not Applicable/Not Available, NIF - No Information Found

REFERENCES:

Code of Federal Regulations (CFR)

The Sigma-Aldrich Library of Regulatory and Safety Data

Chemical Guide and OSHA Hazard Communication Standard

Various Federal, State & Local Regulations

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