



## MATERIAL SAFETY DATA SHEET

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CHEMTREC TOLL-FREE 24 HOURS EMERGENCY PHONE: 800-424-9300  
IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR  
ACCIDENT CONTACT: CHEMTREC INTERNATIONAL - 703-527-3887

THIS MSDS SHEET MEETS THE REQUIREMENTS OF THE FEDERAL OSHA HAZARD  
COMMUNICATION STANDARD (29 CFR 1910.1200)

### Part I

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#### SECTION I - IDENTIFICATION OF PRODUCT

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PRODUCT NAME: EPOXY STEEL SYRINGE (GRAY)  
CODE: EG-330  
CHEMICAL FAMILY: **EPOXY RESIN**  
CHEMICAL NAME: DYGLYCIDYLETHER OF BISPHENOL-A  
DATE OF PREPARATION: 02/18/98

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#### SECTION II - HAZARDOUS INGREDIENTS

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INGREDIENTS	%	CAS #	OSHA PEL mg/m3	ACGIHTLV-TWA mg/m3
Epoxy Resin	<40	025085-99-8	Not Established	Not Established
Calcium Carbonate	>50	1317-65-3	10	10

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#### SECTION III - PHYSICAL DATA

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APPEARANCE AND ORDOR: Black Viscous Liquid, Sweet characteristic odor  
SPECIFIC GRAVITY (water-1): 1.68  
VAPOR PRESSURE (mmHG): N/A  
BOILING POINT (DEGF): N/A  
VAPOR DENSITY (Air=1): N/A  
EVAPORATION RATE Vs Ether: N/A  
SOLUBILITY IN WATER: No  
PERCENT VOLATILE BY VOLUME: 0.0

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SECTION IV - FIRE AND EXPLOSION DATA

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FLASH POINT (METHOD USED): >212 Deg F (PMCC)  
FLAMMABLE LIMIT: No Determined  
EXTINGUISHING MEDIA: Use water Spray, Foam, Carbon Dioxide, Dry Chemical  
SPECIAL FIRE FIGHTING PROCEDURES: Treat as a class B fire.  
UNUSUAL FIRE AND EXPLOSION HAZARD: None.

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SECTION V - HEALTH HAZARD DATA

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OVEREXPOSURE EFFECTS:

INGESTION: Low acute oral toxicity.  
EYESCONTACT: Minor transient irritation, no corneal injury likely.  
SKIN CONTACT: Only Minor Irritation. May be a Skin Sensitizer.  
SKIN ABSORPTION: Not likely to be absorbed through skin in toxic amounts.  
INHALATION: No consider a problem unless heated to high temperature.

EMERGENCY FIRST AID PROCEDURE:

SKIN CONTACT: Wash with soap and water; wash clothes before reuse.  
EYESCONTACT: Flush with excess water for at least five minutes. Consult a physician  
INHALATION: Remove to fresh air if effects occur. Consult a physician.  
INGESTION: Induce vomiting if large amounts are ingested.

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SECTION VI - REACTIVITY DATA

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STABILITY: Stable  
CONDITIONS TO AVOID: Strong Acids, Amines, Mercaptans, Bases in Uncontrolled Amounts.  
INCOMPATIBILITY MATERIALS TO AVOID: Strong Acids, Amines, Mercaptans, Bases in Uncontrolled Amounts  
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal Decomposition may produce carbon monoxide and/or carbon dioxide.  
HAZARDOUS POLYMERIZATION: Will not occur.

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SECTION VII - SPILL OR LEAK PROCEDURE

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Steps to be taken if release or spilled: Absorb with inert material (sand, vermiculite, etc.) Sweep or scoop up and put in disposal container. Flush area immediately with plenty of water; prevent washings from entering waterways.  
Waste disposal method: Incinerate in furnace or bury in landfill in accordance with local, state, and federal regulations.

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SECTION VIII - SPECIAL PROTECTION INFORMATION

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RESPIRATORY PROTECTION: NIOSH approved organic vapor respirators are only required when ventilation is inadequate. NIOSH approved air-line respirators with auxiliary escape air tanks or self-contained breathing apparatus should be used in

VENTILATION: confined spaces.  
Local Mechanical Exhaust.  
PROTECTIVE GLOVES: Impervious gloves.  
EYE PROTECTION: Safety Glasses with side shields.  
OTHER PROTECTIVE EQUIPMENT: Safety shower and eye bath should be provided, use coveralls or apron to protect against skin and clothing contamination.

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SECTION IX - SPECIAL PRECAUTIONS

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Precautions to be taken in storage and handling: Practice reasonable care, and cleanliness.  
Other precautions: Avoid gross contamination of skin. Wash skin with plenty of soap and water, use with adequate ventilation. Avoid breathing vapors

The information in the Material Safety Data Sheet has been compiled from our experience and from data presented in various technical publications. It is the user's responsibility to determine the suitability of this information for the adoption of the safety precautions as may be necessary. We reserve the right to revise Material Safety Data Sheets from time to time as new technical information becomes available. The user has the responsibility to contact the Company to make sure that the MSDS is the latest one issued.

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N/A INDICATE THAT THIS SPECIFICATION DOES NOT APPLY TO THIS PRODUCT

**Part II**

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SECTION I - IDENTIFICATION OF PRODUCT

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PRODUCT NAME: EPOXY STEEL SYRINGE / **HARDENER**  
CODE: EG-330  
CHEMICAL NAME: POLYMERCAPTAN (HARDENER)  
DATE OF PREPARATION: 02/12/98

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SECTION II - HAZARDOUS INGREDIENTS

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INGREDIENT	%	CAS #	OSHA PEL mg/m3	ACGIH TLV-TWA mg/m3
Mercaptan Polymer		Trade Secret	Not Established	N/E
TRIS (2,4,6 - Dimethylaminomethyl PHENOL		Trade Secret	Not Established	N/E
Modified Polyamine		Trade Secret	Not Established	N/E

CONTAINS NO HAZARDOUS CHEMICALS IN EXCESS IF 1% AS INDICATED BY SUPPLIER'S  
MATERIAL SAFETY DATA SHEETS AND OSHA'S HAZARDOUS CHEMICALS STANDARDS

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SECTION III - PHYSICAL DATA

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APPEARANCE AND ODOR:	White Viscous Liquid, Sulphorous Odor
SPECIFIC GRAVITY (WATER-1):	1.68
VAPOR PRESSURE (mmHG):	N/A
BOILING POINT:	>500°F
VAPOR DENSITY (air=1):	N/A
EVAPORATION RATE VS ETHER:	Less Than
SOLUBILITY IN WATER:	Slight
PERCENT VOLATILE BY VOLUME:	0.0

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#### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT (METHOD USED):	>495 Deg F (COC)
FLAMMABLE LIMITS:	NOT DETERMINED
EXTINGUISHING MEDIA:	Use dry chemical, foam or carbon dioxide.
SPECIAL FIRE FIGHTING PROCEDURES:	Treat as a class B fire. Use Water to cool containers.
UNUSUAL FIRE AND EXPLOSION HAZARD:	None.

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#### SECTION V - HEALTH HAZARD DATA

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##### OVEREXPOSURE EFFECTS:

INGESTION: Low acute oral toxicity

EYES: Extremely irritation with possible eye injury.

SKIN: Overexposure could cause burns and blistering.

SKIN ABSORPTION: Not likely to be absorbed through skin in toxic amounts.

INHALATION: Not considered a problem unless heated to high temperature.

##### FIRST AID:

INHALATION: Remove to fresh air if effects occur. Consult a physician.

SKIN: Wash with soap and water. Wash clothes before reuse.

EYES: Irrigate with water for at least fifteen minutes. Consult a physician.

INGESTION: DO NOT induce vomiting, give large quantities of water and give one oz. of vinegar in one ounce water. Consult a Physician.

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#### SECTION VI - REACTIVITY DATA

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STABILITY: Stable

CONDITIONS TO AVOID: Oxidizing Material.

INCOMPATIBILITY MATERIALS TO AVOID: Strong Oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce Carbon Monoxide and/or Carbon Dioxide, Hydrogen Sulfide, Oxides, or Sulfur.

HAZARDOUS POLYMERIZATION: Will not occur.

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#### SECTION VII - SPILL OR LEAK PROCEDURE

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Waste disposal method: Incinerate in furnace or bury in landfill in accordance with local, state, and federal

regulations.

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SECTION VIII - SPECIAL PROTECTION INFORMATION

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VENTILATION: Local Mechanical Exhaust.

PROTECTIVE GLOVES: Impervious gloves.

EYE PROTECTION: Safety Glasses with side shields.

OTHER PROTECTIVE EQUIPMENT: Safety shower and eye bath should be provided, use coveralls or apron to protect against skin and clothing contamination.

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SECTION IX - SPECIAL PRECAUTIONS

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