

PRODUCT NAME: **PM 175 EPOXY RESIN, PART A**

PAGE: 1

## MATERIAL SAFETY DATA SHEET

### 24 HOUR EMERGENCY ASSISTANCE

CHEMTEL: 1-800-255-3924

### GENERAL ASSISTANCE

TELE-TECH: 405-755-8448

**HEALTH:** 2

### HAZARD RATING

**FIRE:** 1

LEAST = 0

SLIGHT = 1

MODERATE = 2

**REACTIVITY:** 1

HIGH = 3

EXTREME = 4

### SECTION I

**PRODUCT:** **PM-175 EPOXY RESIN, PART A**

**CHEMICAL NAME:** MIXTURE

**CHEMICAL FAMILY:** EPOXY

**PRODUCT DESCRIPTION:** EPOXY RESIN

### SECTION II-A

### PRODUCT / INGREDIENT

<u>NO.</u>	<u>COMPOSITION</u>	<u>CAS NUMBER</u>	<u>PERCENT</u>
1	POLYMER OF EPICHLOROHYDRIN AND BISPHENOL A	025085-99-8	83-98%
2	ALKYL GLYCIDYL ETHER (C12 – C14)	068609-97-2	2-17%

### SECTION II-B

### ACUTE TOXICITY DATA

<u>NO.</u>	<u>ACUTE ORAL LD50</u>	<u>ACUTE DERMAL LD50</u>	<u>ACUTE INHALATION LC50</u>
SEE SECTION III			

### SECTION III

### HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910-1200).

**EYE CONTACT:** MAY CAUSE SLIGHT TRANSIENT (TEMPORARY) EYE IRRITATION. CORNEAL INJURY IS UNLIKELY.

**SKIN CONTACT:** HAS CAUSED ALLERGIC SKIN REACTIONS IN HUMANS. PROLONGED EXPOSURE NOT LIKELY TO CAUSE SIGNIFICANT SKIN IRRITATION.

**SKIN ABSORPTION:** A SINGLE PROLONGED EXPOSURE IS NOT LIKELY TO RESULT IN THE MATERIAL BEING ABSORBED THROUGH SKIN IN HARMFUL AMOUNTS. THE DERMAL LD50 HAS NOT BEEN DETERMINED.

**INHALATION:** EXCESSIVE EXPOSURE MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT.

**INGESTION:** SINGLE DOSE ORAL TOXICITY IS LOW. THE ORAL LD50 FOR RAS IS >2000 MG/KG. SMALL AMOUNTS SWALLOWED INCIDENTAL TO NORMAL HANDLING OPERATIONS ARE NOT LIKELY TO CAUSE INJURY; SWALLOWING AMOUNTS LARGER THAN THAT MAY CAUSE INJURY.

**CANCER INFORMATION:** SEVERAL STUDIES HAVE BEEN CONDUCTED TO AESS THE POTENTIAL CARCINOGENICITY OF GIGLYCIDL ETHER OF BISPHENOL A (DGEPA) – BASED EPOXY RESINS. IN ONE OF THESE, A DGEPA-BASED RESIN (CONTAINING HIGH LEVELS OF SEVERAL IMPURITIES, INCLUDING A

**PRODUCT NAME: PM 175 EPOXY RESIN, PART A**

PAGE: 2

KNOWN ANIMAL SKIN CARCINOGEN) REPORTED TO A WEAK CARCINOGENIC RESPONSE IN THE SKIN OF ONE OF THE TWO STRAINS OF MICE TESTED. RECENT STUDIES HAVE SUGGESTED SLIGHT INCREASES IN TWO SYSTEMIC TUMOR TYPES FOLLOWING REPEATED APPLICATION OF CERTAIN DGBPA-CONTAINING RESINS (OR PURE DGEBA), ALTHOUGH THE RESPONSE WAS NOT UNIFORM AMONG PRACTICALLY IDENTICAL RESINS. BASED ON THESE DATA, AND THE OTHER STUDIES WHICH HAVE NOT SHOWN CANCER, THE CAUSE-EFFECT RELATIONSHIP BETWEEN DGEBA- TREATMENT AND THESE CAUSE-EFFECT RELATIONSHIP BETWEEN DGEBA- TREATMENT AND THESE TUMOR INCREASES IS QUESTIONABLE. INDEED, A RECENT REVIEW OF THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS CONCLUDED THAT DGEBA IS NOT CLASSIFIABLE AS TO ITS CARCINOGENICITY.

**SECTION IV****OCCUPATIONAL EXPOSURE LIMITS**

No.	OSHA		ACGIH		OTHER
	PEL/TWA	PEL/CEILING	TLV/TWA	TLV/STEL	
1	N/A	N/A	N/A	N/A	
2	N/A	N/A	N/A	N/A	

**SECTION V****EMERGENCY AND FIRST AID PROCEDURES**

**EYE CONTACT:** FLUSH EYES WITH PLENTY OF WATER  
**SKIN CONTACT:** WASH OFF IN FLOWING WATER OR SHOWER.  
**INHALATION:** REMOVE TO FRESH AIR IF EFFECTS OCCUR. CONSULT A PHYSICIAN.  
**INGESTION:** INDUCE VOMITING IF LARGE AMOUNTS ARE INGESTED. CONSULT MEDICAL PERSONNEL.

**NOTE TO PHYSICIAN:** NO SPECIFIC ANTIDOTE. SUPPORTIVE CARE. TREATMENT BASED ON JUDGEMENT OF THE PHYSICIAN IN RESPONSE TO REACTIONS OF THE PATIENT.

**SECTION VI****SUPPLEMENTAL HEALTH INFORMATION**

**CONTACT A POISON CONTROL CENTER FOR ADDITIONAL TREATMENT INFORMATION.**

**SECTION VII****PHYSICAL DATA**

BOILING POINT (°F): >300F  
VAPOR PRESSURE (mm Hg @ 20°C): 0.06 MM @ 70F  
SOLUBILITY (IN WATER): NONE  
VAPOR DENSITY (AIR = 1): NOT APPLICABLE WHEN FLASH POINT >250F  
EVAPORATION RATE (N-BUTYL ACETATE = 1):  
APPEARANCE AND ODOR: CLEAR (LIGHT YELLOW) LIQUID IF NOT PIGMENTED. FAINT EPOXY.

**SECTION VIII****FIRE AND EXPLOSION HAZARDS**

FLASH POINT AND METHOD: 350-375F, 176.7-190.6C PMCC, ASTM D-93  
FLAMMABLE LIMITS /% VOLUME IN AIR: NOT DETERMINED  
EXTINGUISHING MEDIA: FOAM, CO2, DRY CHEMICAL.  
SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS: WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE KNOWN.

**SECTION IX****REACTIVITY**

PRODUCT NAME: **PM 175 EPOXY RESIN, PART A**

PAGE: 3

STABILITY: (CONDITIOINS TO AVOID) EXCESSIVE HEATING OVER LONG PERIODS OF TIME DEGRADES THE RESIN. FREEZING MAY CAUSE A TEMPORARY HAZE TO DEVELOP. FIRE CONDITIONS INCREASE VISCOSITY AND EXPLODIE EQUIVALENT WEIGHT.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR BY ITSELF, BUT MASSES OF MORE THAN 1 POUND OF PROUDCT PLUS AN ALIPHATIC AMINE WILL CAUSE IRREVERSIBLE POLYMERIZATION WITH CONSIDERABLE HEAT BUILDUP.

CONDITIONS AND MATERIALS TO AVOID: (SPECIFIC MATERIALS TO AVOID) BASE, ACID, AMINES, AND OXIDIZING MATERIALS.

HAZARDOUS DECOMPOSITION PRODUCTS: UNDER CONDITIONS OF IMPERFECT COMBUSTION AND/OR PYROLYSIS VARIOUS PHENOLIC COMPOUNDS CO AND/OR CO2 MAY BE EVOLVED.

---

## **SECTION X**

## **EMPLOYEE PROTECTION**

---

VENTILATION: GOOD GENERAL VENTILATION SHOULD BE SUFFICIENT FOR MOST CONDITIONS. LOCAL EXHAUST VENTILATION MAY BE NECESSARY FOR SOME OPERATIONS.

RESPIRATORY PROTECTION: NO RESPIRATORY PROTECTION SHOULD BE NEEDED. IF RESPIRATORY IRRITATION IS EXPERIENCED, USE AN APPROVED AIR-PURIFYING RESPIRATOR.

PROTECTIVE CLOTHING: WEAR CLEAN, LONG-SLEEVED, BODY-COVERING CLOTHING. USE PROTECTIVE CLOTHING IMPERVIOUS TO THIS MATERIAL. SELECTION OF SPECIFIC ITEMS SUCH AS GLOVES, BOOTS, APRON, OR FULL-BODY SUIT WILL DEPEND OF OPERATION.

EYE PROTECTION: USE SAFETY GLASSES. WHERE CONTACT WITH THIS MATERIAL IS LIKELY, CHEMICAL GOGGLES ARE RECOMMENDED BECAUSE EYE CONTACT MAY CAUSE PAIN EVEN THOUGH IT IS UNLIKELY TO CAUSE INJURY.

---

## **SECTION XI**

## **ENVIRONMENTAL PROTECTION**

---

SPILL OR LEAK PROCEDURES: SOAK UP IN ABSORBENT MATERIAL SUCH AS SAND AND COLLECT IN SUITABLE CONTAINERS. RESIDUAL RESIN MAY BE REMOVED USING STEAM OR HOT SOAPY WATER. SOLVENTS ARE NOT RECOMMENDED FOR CLEANUP UNLESS THE RECOMMENDED EXOSURE GUIDELINES AND SAFE HANDLING PRACTICEC FOR THE SPECIFIC SOLVENT ARE FOLLOWED. CONSLUT APROPRIATE SOLVENTMSDS FOR HANDLING INFORMATION AND EXPOSURE GUIDELINES. KEEP SPARK PRODUCING EQUIPMENT AWAY. FOR LARGE SPILLS, EVACUTAE UPWIND OF SPILLS AND CONTAIN WITH A DIKE.

DISPOSAL METHOD: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. FOR UNUSED OR UNCONTAMINATED MATERILA, THE PREERRED DISPOSAL OPTIONS ARE TO SEND TO A LICENSED RECYCLER, RECLAIMER, OR INCINERATOR. FOR USED OR CONTAMINATED MATERIAL, THE PREFERRED DISPOSAL OPTIONS REMAIN THE SAME, ALTHOUGH ADDITIONAL EVALUATION IS REQUIRED (SEE, FOR EXAMPLE, 40 CFR, PART 261, "IDENTIFICATION AND LISTING OF HAZARDOUS WASE.") ANY DISPOSAL PRACTICE MUST BE IN COMPLIANCE WITH FEDERAL, STATE, PROVINCIAL, AND LOCAL LAWS AND REGULATIONS. CHECKWITH THE APPROPRIATE AGENCIES FOR YOUR LOCATION.

**SECTION XII****SPECIAL PRECAUTIONS**

GROUND ALL TRANSFER EQUIPMENT. TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE. HANDLE AS AN INDUSTRIAL CHEMICAL. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. PRACTICE GOOD CAUTION AND PERSONAL CLEANLINESS TO AVOID SKIN AND EYE CONTACT. HOLD BULK STORAGE UNDER NITROGEN BLANKET. STORE IN A COOL, DRY PLACE WITH ADEQUATE VENTILATION. KEEP AWAY FROM OPEN FLAMES AND HIGH TEMPERATURES.

**SECTION XIII****TRANSPORTATION REQUIREMENTS****DEPARTMENT OF TRANSPORTATION CLASSIFICATION:**

HAZARD CLASS:	NOT HAZARDOUS BY D.O.T. REGULATIONS
IDENTIFICATION NUMBER:	NOT APPLICABLE
LABEL REQUIRED:	NONE
D.O.T. PROPER SHIPPING NAME:	NOT REGULATED

**SECTION XIV****OTHER REGULATORY CONTROLS****NOT MEANT TO BE ALL-INCLUSIVE. SELECTED REGULATIONS PRESENTED.**

A.	SARA TITLE III SECTION 311/312 HAZARDS:	IMMEDIATE HEALTH HAZARD
B.	SARA TITLE III SECTION 313 HAZARDS:	N/A
C.	WHMIS CLASSIFICATION:	CLASSES D2B
D.	TSCA STATUS:	LISTED ON TSCA INVENTORY
E.	OSHA HAZARD COMM. STD.:	HAZARDOUS CHEMICAL

**SECTION XV****STATE REGULATORY INFORMATION**

CA = CALIFORNIA HAZ. SUBST. LIST; CA65 = CALIFORNIA SAFE DRINKING WATER AND TOXICS ENFORCEMENT ACT LIST; CT = CONNECTICUT TOX. SUBST. LIST; FL = FLORIDA SUBST. LIST; IL = ILLINOIS TOX. SUBST. LIST; LA = LOUISIANA HAZ. SUBST. LIST; MA = MASSACHUSETTS SUBST. LIST; ME = MAINE HAZ. SUBST. LIST; MN = MINNESOTA HAZ. SUBST. LIST; NJ = NEW JERSEY HAZ. SUBST. LIST; PA = PENNSYLVANIA HAZ. SUBST. LIST; RI = RHODE ISLAND HAZ. SUBST. LIST.

**SECTION XVI****SPECIAL NOTES**

NEW MSDS.

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, MILAMAR COATINGS, INC. MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. MILAMAR COATINGS, INC. ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

DATE PREPARED: OCTOBER 5, 2011

PREPARED BY: MILAMAR COATINGS, INC.  
311 NW 122<sup>ND</sup> ST, STE 100  
OKLAHOMA CITY, OK 73114