SAFETY DATA SHEET



Date Prepared 7/14/2014
Date Revised 5/29/2015

MIRABEL COATINGS: 480-837-5333

EPOXY 100 RESIN PART B

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EPOXY 100 RESIN PART B **PRODUCT FAMILY:** BISPHENOL-A EPOXY RESIN

PRODUCT USE(S): INDUSTRIAL EPOXY FLOOR COATING **RESTRICTIONS ON USE(S):** NO DATA AVAILABLE

MANUFACTURER 24 HR. EMERGENCY CONTACT NUMBERS

MIRABEL COATINGS, INC. 11803 N SAGUARO BLVD #14 FOUNTAIN HILLS, AZ 85268

480-837-5333

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Skin irritation:Category 2Eye irritation:Category 2ASkin sensitizationCategory 1Aquatic Hazard (Long-Term)Category 2

GHS LABEL ELEMENTS HAZARD PICTOGRAMS:





SIGNAL WORD: WARNING

HAZARD STATEMENTS: Causes serious eye irritaion.

Causes skin irritation.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

Wash skin and face thoroughly after handling.

Wear eye and face protection. Avoid release to the environment

Avoid breathing vapor.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, get medical attention. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash before reuse. If skin irritation occurs: Get medical attention.

Storage:

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents and container in accordance with existing federal, state, and local environmental control laws.

3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE: Mixture

Hazardous Components

Weight Percent	Components	CAS No.	Classification
<=50-100%	Bisphenol A Epoxy Resin	Trade Secret	
<=45%	Glycidylether of C12-14 alcohols	68609-97-2	

The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret.

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get

medical attention, if irritation develops.

SKIN: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated

> clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure.

Wash clothing before reuse. Clean shoes thoroughly before reuse.

INGESTION: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a

position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if **INHALATION:** breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery

position and get medical attention immediately. Maintain an open airway, Loosen tight clothing such as a collar, tie, belt or waistband.

MOST IMPORTANT SYMPTOM(S)/EFFECT(S)

ACUTE: Causes serious eye irritation with symptoms of reddening, tearing, swelling, and burning.

Causes skin irritation. May cause an allergic skin reaction.

Irritating to mouth, throat and stomach.

NOTES TO PHYSICIAN

No specific treatment. Treat symptomatically. Call medical doctor or poison control center immediately if large quantities have been ingested.

5. FIREFIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Dry chemical, Carbon dioxide (CO2), Foam, water spray for large fires.

UNSUITABLE EXTINGUISHING MEDIA: None Known

FIRE FIGHTING PROCEDURE

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimze risk of rupture. During a fire, isocyanate vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion.

HAZARDOUS DECOMPOSITION PRODUCTS

By Fire and Thermal Decomposition: Carbon dioxide (CO2), carbon monoxide (CO), Nitrogen oxides (NOx), halogenated compounds.

UNUSUAL FIRE/EXPLOSION HAZARDS

Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. Closed containers may forcibly rupture under extreme heat or when contents are contaminated with water (CO2 formed). Use cold-water spray to cool fire-exposed containers to minimize isk of rupture.

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7. HANDLING AND STORAGE

Handling/Storage Precautions

Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Keep container closed when not in use. Material is hygroscopic and may absorb small amounts of atmospheric moisture. If contamination with isocyanates is suspected, do not reseal containers. Avoid breathing dust, vapor, or mist. Avoid contact with eyes.

STORAGE PERIOD:

6 Months @ 25°C (77°F) after receipt of material by customer

Min Temperature: 15°C (59°F)
Max Temperature: 49°C (120.2°F)

STORAGE CONDITIONS:

Store separate from food products.

Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200.

SUBSTANCES TO AVOID:

Oxidizing agents, Curing agents / polyamines

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

HAND PROTECTION

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): butyl rubber, Ethyl Vinyl Alcohol Laminate (EVAL), nitrile rubber, neoprene, Polyvinyl Chloride (PVC)

EYE PROTECTION

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

SKIN PROTECTION

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

ADDITIONAL PROTECTIVE MEASURES

Emergency showers and eye wash statinos should be available. Educate and train employees in the safe use and handling of this product. Follow all label instructions.

WORK HYGIENE PRACTICES

Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

COMMENTS

May be harmful or fatal if swallowed. May irritate body tissues. Use with adequate ventilation. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid
ODOR: Slight

APPEARANCE: Colorless / Cloudy Clear

pH:No Data Available **BOILING POINT:**>200°C (>392°F)

FLASH POINT: Closed cup: >100°C (>212°F) Based on similar product

MELTING POINT:No Data AvailableEVAPORATION RATE:No Data AvailableLOWER EXPLOSION LIMIT:No Data AvailableUPPER EXPLOSION LIMIT:No Data Available

VAPOR PRESSURE: <0.1 kPa (<0.75 mmHg) @ 25°C (77°F)

VAPOR DENSITY:No Data Available **RELATIVE VAPOR DENSITY:**No Data Available

SPECIFIC GRAVITY: approx. 1.1 @ 25°C (77°F)

SOLUBILITY IN WATER: Insoluble

AUTO-IGNITION TEMPERATURE:

DECOMPOSITION TEMPERATURE:

No Data Available

10. STABILITY AND REACTIVITY

HAZARDOUS REACTIONS

No specific test data related to reactivity available for this product or its ingredients.

STABILITY

Stable under normal conditions of use and storage.

MATERIALS TO AVOID

Oxidizing agents, Curing Agents

CONDITIONS TO AVOID

Avoid all possible sources of ignition (spark or flame).

HAZARDOUS DECOMPOSITION PRODUCTS

By Fire and Thermal Decomposition: Carbon oxides, Nitrogen oxides (Nox), other undetermined compounds.

11. TOXICOLOGICAL INFORMATION

LIKELY ROUTES OF EXPOSURE: Skin Contact

Eye Contact Inhalation

HEALTH EFFECTS AND SYMPTOMS

ACUTE

Causes serious eye and skin irritation with symptoms of reddening, tearing, swelling, and burning.

TOXICITY DATA FOR BISPHENOL A EPOXY RESIN TOXICITY NOTE

Date is based on similar products.

ACUTE ORAL TOXICITY

LD50: > 2000 mg/kg (rat, male/female) (OECD Test Guideline 401) Studies of a comparable product.

ACUTE INHALATION TOXICITY

LC0: >0.00001 ppm (rat, male)

ACUTE DERMAL TOXICITY

LD50: > 2000 mg/kg (rabbit, male/female) (OECD Test Guideline 402) Studies of a comparable product.

SKIN IRRITATION

Rabbit, OECD Test Guideline 404, Mild irritant

EYE IRRITATION

Rabbit, Mild irritant

Carcinogenicity:

No carcinogenic substances as defined by IARC, NTP and/or OSHA

TOXICITY DATA FOR GLYCIDYLETHER OF C12-C14 ALCOHOLS TOXICITY NOTE

Date is based on similar products.

ACUTE ORAL TOXICITY

LD50: > 2000 mg/kg (rat, male/female)

Studies of a comparable product.

ACUTE INHALATION TOXICITY

LC0: >0.15 mg/l (rat, male)

ACUTE DERMAL TOXICITY

No Data Available

SKIN IRRITATION

Rabbit, OECD Test Guideline 404, Moderate irritant

EYE IRRITATION

Rabbit, Mild irritant

Carcinogenicity:

No carcinogenic substances as defined by IARC, NTP and/or OSHA

MUTAGENICITY

Bisphenol A epoxy resin	Experiment: In vitro Subject: Bacteria Metabolic activation: +/-	Positive
	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic	Positive
	Metabolic activation: +/- Experiment: In vivo Subject: Mammalian-Animal Cell: Germ	Negative
	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative
Glycidylether of C12-C14 alcohols	Experiment: In vitro Subject: Mammalian-Animal Metabolic activation: +/-	Negative
	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic Metabolic activation: +/-	Negative

General Once sensitized, a severe allergic reaction may occur at ver low levels.

CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental EffectsNo known significant effects or critical hazards.Fertility EffectsNo known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

TOXICITY

Bisphenol A epoxy resin	EPA CFR	Acute	EC50	72 hours Static	Algae	9.4	m g/l
	OECD 202 <i>Daphnia</i> sp. Acute Immobilisation Test	Acute	EC50	48 hours Static	Daphnia	1.7	mg/l
	Unknown guidelines	Acute	IC50	3 hours Static	Bacteria	>100	m g/l
	OECD 203 Fish, Acute Toxicity Test	Acute	LC50	96 hours Static	Fish	1.5	m g/l
	OECD 211 Daphnia Magna Reproduction Test	Chronic	NOEC	21 days Semi-static	Daphnia	0.3	m g/l
Glycidylether of C12-C14 alcohols	OECD 202 <i>Daphnia</i> sp. Acute Immobilisation Test	Acute	EL50	48 hours Static	Daphnia	7.2	m g/l
	OECD 201 Alga,	Acute	IC50	72 hours	Algae	843.75	m g/l
	Growth Inhibition Test	<u> </u>		Static			
	OECD 209 Activated Sludge, Respiration	Acute	IC50	3 hours	Bacteria	>100	mg/l
	Inhibition Test OECD 203 Fish, Acute Toxicity Test	Acute	LC50	96 hours Static	Fish	5000	m g/l

DEGRADABILITY

Bisphenol A epoxy resin: Not readily biodegradable

BIOACCUMULATIVE POTENTIAL

Low

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste disposal should be in accordance with existing federal, state and local environmental control laws. Incineration is the preferred method. Do not dump into sewers, ground, or any body of water.

EMPTY CONTAINER PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue; observe all precautions for product. Do not heat or cut empty container with electric or gas torch because highly toxic vapors and gases are formed. Do not reuse without thorough commercial cleaning and reconditioning. If container is to be disposed, ensure all product residues are removed prior to disposal.

RCRA/EPA WASTE INFORMATION

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION

LAND TRANSPORT (DOT)

PROPER SHIPPING NAME: Epoxy Resin Side B (Bisphenol A)

HAZARD CLASS OR DIVISION: 9
UN/NA NUMBER: 3082
PACKAGING GROUP: III
HAZARD LABEL(S): Class 9

ENVIRONMENTAL HAZARDS: Yes





RSPA/DOT REGULATED COMPONENTS:

Bisphenol A Epoxy Resin - Marine pollutant

REPORTABLE QUANTITY:No Data Available

SEA TRANSPORT (IMDG): See Additional Transportation Information (Below)

ADDITIONAL TRANSPORTATION INFORMATION

DOT: Non-bulk packages of this product are not regulated as hazardous materials unless transported by inland waterway. The marine pollutant mark is not required when transported on inland waterways in sizes of ≤ 5 L or ≤ 5 kg.

TDG: The product is not regulated as a dangerous good when transported by road or rail.

IMDG: The marine pollutant mark is not required when transported in sizes of <= 5L or <=5kg.

IATA: Passener and Cargo Aircraft: Quantity Limitation: 450 L Packaging instructions: 964 Cargo Aircraft Only: Quantity Limitation: 450 L Packaging instructions: 964

15. REGULATORY INFORMATION

UNITED STATES FEDERAL REGULATIONS US. TOXIC SUBSTANCES CONTROL ACT:

Listed on the TSCA Inventory or Exempted.

US. EPA CERCLA HAZARDOUS SUBSTANCES (40 CFR 302) COMPONENTS:

1-chloro-2, 3-epoxypropane <0.0008% Product Reportable Quantity: 12,500,000 lb

SARA SECTION 311/312 HAZARD CATEGORIES:

Acute Health Hazard

US. EPA EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA) SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCE (40 CFR 355, APPENDIX A) COMPONENTS:

None

US. EPA EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA) SARA TITLE III SECTION 313 EXTREMELY HAZARDOUS SUBSTANCE (40 CFR 372.65) - SUPPLIER NOTIFICATION REQUIRED COMPONENTS:

None

US. EPA RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) COMPOSITE LIST OF HAZARDOUS WASTES AND APPENDIX VIII HAZARDOUS CONSTITUENTS (40 CFR 261):

Under the RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste. If discarded in purchased form this product is ignitable, hazardous waste.

STATE RIGHT-TO-KNOW INFORMATION

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

CALIFORNIA PROP. 65:

This product contains a chemical known to the State of California to cause cancer: 1-chloro-2,3-epoxypropane

Based on information provided by our suppliers, this product is considered "DRC Conflict free" as defined by the SEC Conflict Minerals Final Rule (Release No. 34-67716; File No. S7-40-10; Date: 08-22-2012).

16. OTHER INFORMATION

The method of hazard communication for Mirabel Coatings, Inc. is comprised of Product Labels and Safety Data Sheets (SDS).

The handling of products containing reactive HDI polyisocyanate/prepolymer and/or monomeric HDI requires appropriate protective measures referred to in this SDS. These products are therefore recommended only for use in industrial or trade (commerical) applications. They are not suitable for use in Do-It-Yourself applications.

NFPA CODES:



DATE REVISED: 5/29/2015

REVISION SUMMARY: Conforming to the Globally Harmonized System SDS guidelines.

MANUFACTURER DISCLAIMER:

The information contained herein is based on the data available to us and is believed to be accurate. However, Mirabel Coatings, Inc. makes no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. The information in this SDS relates only to the specific material designated herein. Mirabel Coatings, Inc. assumes no legal responsibility for use of or reliance upon the information in this SDS, nor for injuries from the use of the product described herein.