#### I. PRODUCT AND COMPANY IDENTIFICATION

**Company:** Epoxy Systems, Inc.

**Address:** 20774 W. Pennsylvania Ave.

Dunnellon, FL 34431

Product Name: A Component: Epoxy.com Product #648

**Product Description:** High Temp Epoxy Resin Coating

**Product Description:** Epoxy Coating

**Emergency Contact No.:** 1-800-633-8253 (**PERS**)

**Date Prepared or Revised:** April 2013

For most current MSDS, please visit our website at www.epoxy.com

## II. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Names                           | CAS Numbers |
|--|-------------|
| BisPhenolA/Epichlorohydrin (Epoxy Resin) | 25068-38-6  |
| Epoxy Novolac                            | 028064-14-4 |
| Amorphous Silicon dioxide                | 112945-52-5 |

The remaining ingredients are designated as "trade secret".

#### III. HAZARD IDENTIFICATION

# EMERGENCY OVERVIEW

Non-corrosive.

May cause eye and skin irritation. May cause skin sensitization.

#### POTENTIAL HEALTH EFFECTS

**ACUTE** 

**Eye Contact:** May cause eye irritation, swelling, tearing, redness or cornea damage.

**Skin Contact:** Moderate irritation. May cause skin sensitization, evidenced by rashes and hives.

**Inhalation:** Moderate irritation to the nose and respiratory tract. May cause Central Nervous System

depression, evidenced by headache, dizziness, and nausea.

**Ingestion:** May cause irritation to the gastrointestinal tract. May cause Central Nervous System

depression or other systemic effects.

**Systemic Effects:** Lungs, eyes, and skin.

IV. FIRST AID MEASURES

**Eye Contact:** Immediately flush eyes with plenty of cool water for at least 15 minutes while holding

the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A

PHYSICIAN.

**Skin Contact:** Remove product and immediately wash affected area with soap and water. Do not

apply greases or ointments. Remove contaminated clothing. Wash clothing with soap and water before reuse. If redness, burning, or swelling persists, **CONSULT A** 

PHYSICIAN.

**Ingestion: DO NOT INDUCE VOMITING.** Never administer anything by mouth to an

unconscious person. Rinse out mouth with water, then drink sips of water to remove taste from mouth. **CONSULT A PHYSICIAN** if vomiting occurs spontaneously, keep

head below hips to prevent aspiration.

**Inhalation:** Remove patient to fresh air. If patient continues to experience difficulty breathing,

CONSULT A PHYSICIAN.

V. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Water fog, carbon dioxide or dry chemical, aqueous foam.

Fire And Explosion Hazard: Hazardous decomposition products may occur when materials polymerize at

temperatures above 500°F. Do not allow run-off from fire fighting to enter drains or

water courses.

Fire Fighting Equipment and

**Procedures:** 

Wear full protective clothing and self-contained breathing apparatus for fire fighting. Isolate fuel supply from fire. Clear fire area of all non-emergency personnel. Use water

spray to cool fire-exposed surfaces and containers.

VI. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Use cautious judgment when cleaning up spill. Shut off leaks, if possible without

personal risk. Wear suitable protective clothing, gloves and eye/face protection.

Evacuate personnel to safe areas.

**Environmental Precautions:** Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters,

and soils.

Clean-up Methods: Small spills: Soak up with absorbent material such as clay, sand or other suitable non-

reactive material. Place in leak-proof containers. Seal tightly for proper disposal. **Large spills**: Approach suspected leak areas with caution. Create a dike or trench to contain material. Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal.

Notify authorities if any exposures to the general public or environment occur or are

likely to occur. Dispose in accordance with federal, state, and local regulations.

VII. STORAGE AND HANDLING

**Additional Information:** 

**Storage:** Keep away from: acids, oxidizers, heat, or flames. Keep in cool, dry, well-ventilated area

in closed containers. Protect containers from physical damage.

**Handling:** To prevent skin and eye contact under the foreseeable conditions of use, wear

appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Avoid breathing fumes. Handle in a well-

ventilated work area.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Protective Measure:** Wear appropriate personal protective equipment.

**Eye Protection:** Avoid contact with eyes. Wear chemical splash goggles or safety glasses with side

shield.

**Hand Protection:** Wear chemical-resistant gloves such as: Nitrile, neoprene, butyl.

**Skin and Body Protection:** Wear chemical-resistant gloves and other clothing as required to minimize contact.

**Respirator Protection:** Not required for properly ventilated areas.

**Exposure Limits:** 

| COMPONENT                                | ACGIH<br>(TLV) | OSHA<br>(PEL) |
|--|----------------|---------------|
| BisPhenolA/Epichlorohydrin (Epoxy Resin) | N/E            | N/E           |
| Amorphous Silicon Dioxide                | 10 mg/m 3      | 15 mg/m3      |

# IX. PHYSICAL AND CHEMICAL PROPERTIES

Form: Paste Freezing Point: N/E

Color:Clear YellowishFlash Point:>250°F (Open Cup)Odor:SweetSpecific Gravity:1.13 @ 75°FVapor Pressure:Not VolatileSolubility In Water:Insoluble

**Boiling Point:**  $>500^{\circ}\text{F} (> 260^{\circ}\text{C})$ 

X. <u>REACTIVITY DATA</u>

**Stability:** Stable under normal storage conditions.

Conditions To Avoid: Incompatible chemicals, high heat and open flame.

Materials To Avoid: Oxidizing agents, acids, organic bases, and amines.

Hazardous Decomposition Products: Combustion may produce carbon monoxide, carbon dioxide, aldehydes, acids

and other organic substances.

**Hazardous Polymerization:** Will not occur.

# XI. TOXICOLOGICAL PROPERTIES

Acute Oral (LD $_{50}$ , Rat):Non toxicAcute Dermal (LD $_{50}$ , Rabbit):N/EAcute Inhalation (LC $_{50}$ , Rat):N/E

**Chronic Health Hazard:** The Diglycidyl Ether of Bisphenol A has shown weak carcinogenicity in 2-year mice

bioassays. This material has shown activity in-vitro microbial mutagenicity screening and has produced chromosomal aberrations in cultured rat liver cells. No activity when

tested by vivo mutagenicity assays.

#### XII. DISPOSAL CONSIDERATIONS

Waste From Residues / Unused Products:

This material is not a hazardous waste by RCRA criteria (40 CFR 261). Dispose of container and unused contents in accordance with federal, state, and local requirements.

# XIII. TRANSPORTATION

**DOT:** Not Regulated For Transport

ICAO/IATA:

**Basic Shipping Requirements:** 

UN Number: UN3082

**Proper Shipping Name:** Environmentally Hazardous Substance, Liquid, n.o.s. (Bisphenol-A Epichlorohydrin

resin)

Hazard Class: 9
Packing Group: III

IMO:

**Basic Shipping Requirements:** 

UN Number: UN3082

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, n.o.s. (Bisphenol-A Epichlorohydrin

resin), Marine Pollutant

Hazard Class: 9
Packing Group: III

# XIV. REGULATORY INFORMATION

| Country | Regulatory List |
|---------|-----------------|
| USA     | TSCA            |

EPA SARA Title III Section 312 (40 CFR 370) Hazardous Classification: Acute/Chronic Health Hazard.

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level: None.

US. California "Safe Drinking Water and Toxic Enforcement Act" (Proposition 65): This product contains small traces of the following chemicals that are known to the State of California to cause cancer and/or reproductive toxicity and other har

| Component             | Regulation | Concentration | Remarks      |
|-----------------------|------------|---------------|--------------|
| Phenylglycidyl ether* | ACGIH      | Trace         | Carcinogenic |
| Epichlorohydrin*      | ACGIH      | Trace         | Carcinogenic |

<sup>\*</sup> May be absorbed through skin.

# XV. OTHER INFORMATION

#### HMIS RATING

| Health | Flammability | Physical Hazard |
|--------|--------------|-----------------|
| 2      | 1            | 0               |

N/E - Not Established

This Material Safety Data Sheet (MSDS) is prepared by Epoxy Systems, Inc. in compliance with the requirements of OSHA 29 CFR Part 1910.1200. The information it contains is offered in good faith as accurate as of the date of this MSDS. This MSDS is provided solely for the purpose of conveying health, safety, and environmental information. No warranty, expressed or implied, is given. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

#### I. PRODUCT AND COMPANY IDENTIFICATION

**Company:** Epoxy Systems, Inc.

**Address:** 20774 W. Pennsylvania Ave.

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Product Name: B Component: Epoxy.com Product #648

**Product Description:** High Temp Epoxy Resin Coating

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**Emergency Contact No.:** 1-800-633-8253 (**PERS**)

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For most current MSDS, please visit our website at www.epoxy.com

#### II. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Names  | CAS Numbers |
|---|-------------|
| Benzyl Alcohol  | 100-51-6    |
| Methyleneoxide, polymer with benzenamine,, hydrogenated | 135108-88-2 |
| Amorphous Silicon dioxide                               | 112945-52-5 |
| Titanium Dioxide  | 13463-67-7  |
| Magnesium silicate                                      | 14807-96-6  |
| Ceramic Microspheres                                    | 66402-68-4  |
| Calcium Carbonate                                       | 1317-65-3   |

The remaining ingredients are designated as "trade secret".

# III. HAZARD IDENTIFICATION

#### **EMERGENCY OVERVIEW**

Corrosive.

Severe irritation to eyes and skin. May cause skin sensitization.

Components of the product may affect the nervous system.

#### POTENTIAL HEALTH EFFECTS

ACUTE

**Eye Contact:** Severe irritation, swelling, tearing, redness or cornea damage. May cause burns and

tissue damage.

**Skin Contact:** Severe irritation. May cause burns and tissue damage. May cause skin sensitization

evidenced by rashes and hives.

**Inhalation:** Moderate irritation to the nose and respiratory tract. May cause Central Nervous System

depression, evidenced by giddiness, headache, dizziness, and nausea.

**Ingestion:** May cause irritation to the gastrointestinal tract. May cause headache nausea. May cause

Central Nervous System depression or other systemic effects.

**Systemic Effects:** Lungs, eyes, and skin.

# IV. FIRST AID MEASURES

**Eye Contact:** Immediately flush eyes with plenty of cool water for at least 15 minutes while holding

the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A

PHYSICIAN.

**Skin Contact:** Remove product and immediately wash affected area with soap and water. Do not

apply greases or ointments. Remove contaminated clothing. Wash clothing with soap and water before reuse. If redness, burning, or swelling persists, **CONSULT A** 

PHYSICIAN.

**Ingestion: DO NOT INDUCE VOMITING.** Never administer anything by mouth to an

unconscious person. Rinse out mouth with water, then drink sips of water to remove taste from mouth. **CONSULT A PHYSICIAN** if vomiting occurs spontaneously, keep

head below hips to prevent aspiration.

# **Epoxy.com Product #648 EPOXY COATING**

MATERIAL SAFETY DATA SHEETS **Inhalation:** 

Remove patient to fresh air. If patient continues to experience difficulty breathing,

CONSULT A PHYSICIAN.

V. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Fire And Explosion Hazard:

Water spray, fog or foam, carbon dioxide, dry chemical, limestone powder.

Irritating and toxic fumes may be produced at high temperature. In a fire, may produce carbon monoxide, toxic nitrogen oxide, ammonia, and carbon dioxide. Use of water may result in the formation of very toxic aqueous solution. Do not allow run-off from fire

fighting to enter drains or water courses.

Fire Fighting Equipment and

**Procedures:** 

Wear full protective clothing and self-contained breathing apparatus for fire fighting.

Isolate fuel supply from fire. Clear fire area of all non-emergency personnel.

VI. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Use cautious judgment when cleaning up spill. Shut off leaks, if possible without

personal risk. Wear suitable protective clothing, gloves and eye/face protection.

Evacuate personnel to safe areas.

Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters, **Environmental Precautions:** 

and soils.

**Clean-up Methods:** Small spills: Soak up with absorbent material such as clay, sand or other suitable non-

> reactive material. Place in leak-proof containers. Seal tightly for proper disposal. Large spills: Approach suspected leak areas with caution. Create a dike or trench to contain material. Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal.

Notify authorities if any exposures to the general public or environment occur or are likely to occur. Dispose in accordance with federal, state, and local regulations.

VII. STORAGE AND HANDLING

**Additional Information:** 

Storage: Keep away from: acids, oxidizers, heat, or flames. Keep in cool, dry, well-ventilated area

in closed containers. Protect containers from physical damage.

To prevent skin and eye contact under the foreseeable conditions of use, wear Handling:

appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Avoid breathing fumes. Handle in a well

ventilated work area.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Protective Measure:** Wear appropriate personal protective equipment.

**Eve Protection:** Avoid contact with eyes. Wear chemical splash goggles or safety glasses with side

**Hand Protection:** Wear chemical-resistant gloves such as: Nitrile, neoprene, butyl.

**Skin and Body Protection:** Wear chemical-resistant gloves and other clothing as required to minimize contact.

**Respirator Protection:** Not required for properly ventilated areas.

**Exposure Limits:** 

| Chemical Names     | ACGIH<br>(TLV) | OSHA<br>(PEL) |
|--------------------|----------------|---------------|
| Benzyl Alcohol     | 5 ppm          | 5 ppm         |
| Isophorone Diamine | 10 ppm         | 10 ppm        |

IX. PHYSICAL PROPERTIES

**Freezing Point:** Form: Liquid N/E Color: Dark Amber Vapor Pressure: N/E

Flash Point: Odor: Ammonia 262°F (128°C) **Boiling Point:** N/E **Specific Gravity:** .89 @ 72°F

**Solubility In Water:** Slight

X. REACTIVITY DATA

**Stability:** Stable under normal storage conditions.

**Conditions To Avoid:** Incompatible chemicals, high heat, and open flame.

**Materials To Avoid:** Oxidizing agents and acids.

**Hazardous Decomposition** Combustion may produce carbon monoxide, carbon dioxide, and nitrogen oxide, and

**Products:** other organic substances.

**Hazardous Polymerization:** Will not occur.

# XI. TOXICOLOGICAL PROPERTIES

Acute Oral (LD $_{50}$ , Rat):2,000 mg/kgAcute Dermal (LD $_{50}$ , Rabbit):2100 mg/kgAcute Inhalation (LC $_{50}$ , Rat):N/E

**Chronic Health Hazard:** Components of this product are not listed as carcinogens in concentrations of 0.1% or

greater. Repeated or prolonged exposure may cause allergic reaction and/or limited

sensitization.

# XII. DISPOSAL CONSIDERATIONS

Waste From Residues / Dispose of container and unused contents in accordance with federal, state, and local

Unused Products: requirements.

# XIII. TRANSPORTATION

US DOT: Not Regulated for Transport IATA: Not Regulated for Transport IMO: Not Regulated for Transport

#### XIV. REGULATORY INFORMATION

| Country | Regulatory List |
|---------|-----------------|
| USA     | TSCA            |

EPA SARA Title III Section 312 (40 CFR 370) Hazardous Classification: Acute/Chronic Health Hazard.

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level: Phenol.

**US.** California "Safe Drinking Water and Toxic Enforcement Act" (Proposition 65): This product contains small traces of the following chemicals that are known to the State of California to cause cancer and/or reproductive toxicity and other harm.

# XV. OTHER INFORMATION

# HMIS RATING

| Health | Flammability | Physical Hazard |
|--------|--------------|-----------------|
| 3      | 1            | 0               |

N/E - Not Established

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