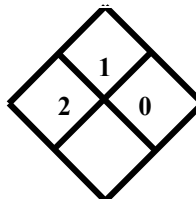


**DISTRIBUTED BY FREEMAN MFG & SUPPLY CO. 800-321-8511**

24-Hour Emergency Phone: 1-888-354-3323

**Effective Date:** 1/20/04**Material Safety Data Sheet**

MSDS No: 6050

**1. PRODUCT IDENTIFICATION****Trade Name:** RenCast 3215-1**Chemical Family:** Epoxy

NFPA RATING

<b>Health:</b>	<b>2*</b>
<b>Flammability:</b>	<b>1</b>
<b>Reactivity:</b>	<b>0</b>
<b>Personal Protection:</b>	

HMIS RATING

**Synonyms:**

RP 3215-1 Resin

**Intended Use or Product Type:** Casting resin**2. COMPOSITION / INFORMATION ON INGREDIENTS**

O S H A	CAS No.	CHEMICAL IDENTITY	EXPOSURE LIMITS				CARCINOGEN STATUS			
			ACGIH		OSHA		MFR.	IARC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	14808-60-7	Quartz (SiO <sub>2</sub> )  Common Name: Crystalline silica	0.05 mg/m <sup>3</sup>	NE	0.1 mg/m <sup>3</sup>	NE	NE	Yes	Yes	NR
*	25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane Bisphenol A diglycidyl ether polymer	NE	NE	NE	NE	NE	NR	NR	NR
*	3101-60-8	Oxirane, [[4-(1,1-dimethylethyl)phenoxy]me thyl]- Butylphenyl glycidyl ether	NE	NE	NE	NE	NE	NR	NR	NR
*	68609-97-2	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. C12 and C14 Alkyl Glycidyl Ethers	NE	NE	NE	NE	NE	NR	NR	NR

\* = OSHA Hazardous Ingredient

**3. HAZARDS IDENTIFICATION****Emergency Overview:** Causes skin and eye irritation. May cause allergic skin reaction.

Effective Date: 1/20/04

**Primary Route(s) of Entry:** Dermal; heated product may produce inhalable vapors.

**Chronic:** This product contains Crystalline silica. Repeated inhalation of respirable free Crystalline silica dust may cause delayed lung injury (silicosis) and cancer.

#### **4. FIRST AID MEASURES**

**Ingestion:** If conscious, give 2 - 4 glasses of water to drink. Do not induce vomiting. Call a physician.

**Skin:** Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes.

**Inhalation:** Remove to fresh air. Call a physician.

**Eyes:** Immediately flush eyes with water for at least 15 minutes. Call a physician.

**Overexposure Effects:** Causes skin and eye irritation. May cause allergic skin reaction.

**Medical Conditions Aggravated by Exposure:** Skin and eye conditions.

**Additional Information:** Referral to a physician is recommended if there is any question about the seriousness of any injury.

#### **5. FIRE FIGHTING MEASURES**

<b>Flash Point:</b>	> 320°F (> 160 °C)
<b>Flash Point Method Used:</b>	PMCC
<b>Flammable Limits in Air (Lower - % by volume):</b>	Not established
<b>Flammable Limits in Air (Upper - % by volume):</b>	Not established

**Fire Fighting Extinguishing Media:** Carbon dioxide, dry chemical, foam, water.

**Fire Fighting Equipment:** Use self-contained breathing apparatus.

**Fire and Explosion Hazards:** Decomposition and combustion products may be toxic.

#### **6. ACCIDENTAL RELEASE MEASURES**

**Accidental Release Measures:** Remove spillage by absorbing in absorbent material.

#### **7. HANDLING AND STORAGE**

**Signal Word:** Warning!

**Precautions:** Can cause skin irritation, eye irritation, and allergic skin reaction. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Notice! Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury.

Effective Date: 1/20/04

**Other Handling Information:** Crystalline silica may be generated when machining cured products. Overexposure may create possible cancer and silicosis hazard.

## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Skin Protection:** Wear impermeable gloves.

**Respiratory Protection:** Use NIOSH approved organic vapor cartridge respirator when vapor/mist exposure is likely.

**Eye Protection:** Wear splash-proof chemical goggles.

**Engineering Controls:** General mechanical and local exhaust in accordance with ACGIH recommendations.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Color:</b>	Black
<b>Odor:</b>	Odorless
<b>Physical State:</b>	Thick liquid
<b>Vapor Pressure:</b>	0.06 mm Hg at 21°C (70 °F)
<b>Specific Gravity:</b>	1.87 (water = 1)
<b>Boiling Point:</b>	293°F (145 °C)
<b>Evaporation Rate:</b>	Not Determined
<b>Vapor Density:</b>	Not Determined
<b>pH:</b>	Not Determined

**Percent Volatile:** 0%

## **10. STABILITY AND REACTIVITY**

**Conditions to Avoid:** Excessive heat for prolonged periods of time.

**Stability:** Stable.

**Incompatibility:** Strong oxidizers, acids and bases.

**Hazardous Decomposition Products:** Combustion may form toxic materials, such as carbon dioxide, carbon monoxide.

**Hazardous Polymerization:** Will not occur.

## **11. TOXICOLOGICAL INFORMATION**

**Sensitization:** Possible in susceptible individuals.

**Carcinogenicity:** This product contains crystalline silica. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis) and cancer.

**Skin Irritation:** Irritant.

**Eye Irritation:** Irritant.

Effective Date: 1/20/04

**12. ECOLOGICAL INFORMATION****13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Consult qualified local or corporate personnel for method that will comply with local, state and federal health and environmental regulations.

**14. TRANSPORT INFORMATION****DOT: Non-Bulk**

**Proper Shipping Name:** Resin compounds, N.O.I.

**Department of Transportation:** Not regulated as a hazardous material by the U.S. Dept. of Transportation (DOT) 49 CFR 172.101 hazardous materials table.

**15. REGULATORY INFORMATION****US Federal Regulations:**

**Occupational Safety and Health Act (OSHA):** This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

**Resource Conservation and Recovery Act (RCRA):** Not a hazardous waste under RCRA (40 CFR 261).

**SARA Title III: Section 313 Toxic Chemical List (TCL):** This product does not contain any chemicals for routine annual toxic chemical release reporting under Section 313 (40 CFR 372).

**TSCA Section 8(b) - Inventory Status:** Chemical components listed on TSCA Inventory.

**TSCA Section 12(b) - Export Notification:** This product contains the following chemical(s) that are subject to a Section 12(b) export notification:

Chemical Name: Oxirane, 2,2'-[(1-Methylethylidene)bis(4,1-Phenyleneoxymethylene)]bis-

Common Name: Diglycidyl ether of bisphenol A

CAS Number: 1675-54-3

**State Regulations:**

**Pennsylvania Right-to-Know:** The following is required composition information:

Chemical Name: Carbonic Acid Calcium Salt (1:1)

Common Name: Calcium carbonate

CAS Number: 471-34-1

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane

Common Name: Bisphenol A Diglycidyl Ether Polymer

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**Effective Date:** 1/20/04

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CAS Number: 25068-38-6  
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Iron  
CAS Number: 7439-89-6  
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Aluminum hydroxide  
Common Name: Hydrated Alumina  
CAS Number: 21645-51-2  
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.  
Common Name: C12 and C14 Alkyl Glycidyl Ethers  
CAS Number: 68609-97-2  
Comment: Not on Pennsylvania Hazardous Substance List

## **16. OTHER INFORMATION**

<b>MSDS No:</b>	6050
<b>Approved By:</b>	Dianne Blessing
<b>Title:</b>	EH&S Specialist

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