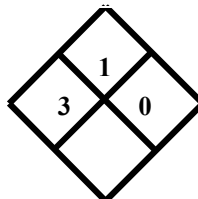


DISTRIBUTED BY FREEMAN MFG & SUPPLY CO. 800-321-8511

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

Effective Date: 10/12/04**Material Safety Data Sheet**

MSDS No: 6045

1. PRODUCT IDENTIFICATION**Trade Name:** RenCast 3209-1**Chemical Family:** Epoxy

NFPA RATING

Health:	3*
Flammability:	1
Reactivity:	0
Personal Protection:	

HMIS RATING

Synonyms:

RP 3209-1 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 ₂) Common Name: Crystalline silica	0.05 mg/m ³	NE	0.1 mg/m ³	NE	NE	Yes	Yes	NR
*	2425-79-8	Oxirane, 2,2'-[1,4-Butanediylbis(Oxymethylene)]bis-Butanediol diglycidyl ether Common Name:	NE	NE	NE	NE	NE	NR	NR	NR
*	25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane Bisphenol A diglycidyl ether polymer Common Name:	NE	NE	NE	NE	NE	NR	NR	NR
*	3101-60-8	Oxirane, [[4-(1,1-dimethylethyl)phenoxy]methyl]-Butylphenyl glycidyl ether Common Name:	NE	NE	NE	NE	NE	NR	NR	NR
*	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester Dibutyl phthalate Common Name:	5 mg/m ³	NE	5 mg/m ³	NE	NE	NR	NR	NR

NE = Not Established NR = Not Reviewed * = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview: Causes severe skin irritation. Causes eye irritation. May cause skin burns and allergic skin reaction.

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.

This product contains dibutyl phthalate which may cause adverse reproductive effects in laboratory animals. The relevance to humans is not known.

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 severe skin irritation. Causes eye irritation. May cause skin burns and 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

Flash Point: 315°F (157 °C)

Flash Point Method Used: PMCC

Flammable Limits in Air (Lower - % by volume): Not established

Flammable Limits in Air (Upper - % by volume): 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.

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7. HANDLING AND STORAGE

Signal Word: Danger!

Precautions: Causes severe skin irritation and may cause skin burns. Can cause eye irritation and allergic skin reaction. Do not get on skin or on clothing. Avoid contact with eyes. Wash thoroughly after handling. Notice! Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury.

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

Color:	Black
Odor:	Mild
Physical State:	Filled Liquid
Solubility in Water:	Insoluble
Vapor Pressure:	0.2 mm Hg at 20°C (68 °F)
Specific Gravity:	2.5 - 2.6 (water = 1)
Boiling Point:	Not Determined
Evaporation Rate:	Not Determined
Vapor Density:	Not Determined
pH:	Not Determined

Percent Volatile: Negligible.

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.

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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:** Severe skin irritant.**Eye Irritation:** Irritant.**Additional Information:** This product contains dibutyl phthalate which may cause adverse reproductive effects in laboratory animals. The relevance to humans is not known.**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 product is considered to be a hazardous chemical under the OSHA Hazard Communication Standard (29 CFR 1910.1200).**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 contains a toxic chemical(s) for routine annual toxic chemical release reporting under section 313 (40 CFR 372). This information must be included in all MSDS's copied or distributed for this material.

Chemical Name: 1,2-Benzenedicarboxylic acid, dibutyl ester

Common Name: Dibutyl phthalate

Percent in Composition: 2.7 % by wt

Comment:

TSCA Section 8(b) - Inventory Status: All chemical components of this product are in compliance with TSCA inventory requirements.

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TSCA Section 12(b) - Export Notification: This product does not contain any chemical(s) that are subject to a Section 12(b) export notification.

State Regulations:

California Proposition 65: The following is required composition information. This product contains the following chemical(s) which are currently listed on the California list of Known Carcinogens and Reproductive Toxins:

Chemical Name: Quartz (SiO₂)
Common Name: Crystalline silica
CAS Number: 14808-60-7
Percent in Composition: 2.205 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer.

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

Chemical Name: Iron Oxide
CAS Number: 1317-61-9
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
CAS Number: 25068-38-6
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Limestone
Common Name: Calcium carbonate
CAS Number: 1317-65-3
Comment: Hazardous Substance

Chemical Name: Oxirane, 2,2'-[1,4-Butanediylbis(Oxymethylene)]bis-
Common Name: Butanediol diglycidyl ether
CAS Number: 2425-79-8
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 1,2-Benzenedicarboxylic acid, dibutyl ester
Common Name: Dibutyl phthalate
CAS Number: 84-74-2
Comment: Environmental Hazardous Substance

Chemical Name: Quartz (SiO₂)
Common Name: Crystalline silica
CAS Number: 14808-60-7
Comment: Hazardous Substance

16. OTHER INFORMATION

MSDS No: 6045
Approved By: Dianne Blessing
Title: EH&S Specialist

Effective Date: 10/12/04

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