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24-Hour Emergency Phone: (800) 328-8501
International Emergency Phone: (409) 727-0831
Asia Pacific Emergency Phone: (65) 6336-6011

Effective Date: 7/8/09

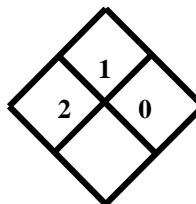
Material Safety Data Sheet

MSDS No: 6069

1. PRODUCT IDENTIFICATION

Trade Name: RenCast 3266

Chemical Family: Epoxy



NFPA RATING

Health:	2
Flammability:	1
Reactivity:	0
Personal Protection:	

HMIS RATING

Synonyms:
RP 3266 Resin

Intended Use or Product Type:

Casting resin

2. COMPOSITION / INFORMATION ON INGREDIENTS

O S H A	CAS No.	CHEMICAL IDENTITY	EXPOSURE LIMITS				MFR.	CARCINOGEN STATUS		
			ACGIH		OSHA			IARC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	101-02-0	Phosphorous acid, triphenyl ester Common Name: Triphenyl phosphite Concentration: 5.00 - 10.00 % by wt	NE	NE	NE	NE	TLV 0.1 mg/m3	NR	NR	NR
*	2426-08-6	Oxirane, (Butoxymethyl)- Common Name: Butyl glycidyl ether Concentration: 1.00 - 5.00 % by wt	25 ppm	NE	50 ppm	NE	Table Z1A TWA 25 ppm	NR	NR	NR
	25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane Common Name: Bisphenol A diglycidyl ether polymer Concentration: 60.00 - 100.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR
	Held confidential by our supplier	Polyester Resin Concentration: 5.00 - 10.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR

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

3. HAZARDS IDENTIFICATION

Emergency Overview: Causes skin and eye irritation. May cause allergic skin and respiratory reactions.

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

Chronic: Butyl Glycidyl Ether (BGE) may have effects on central nervous and reproductive systems.

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes. Seek immediate medical attention.

Inhalation: Remove to fresh air. Seek immediate medical attention.

Eyes: Immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention.

Overexposure Effects: Causes skin and eye irritation. May cause allergic skin and respiratory reactions.

Medical Conditions Aggravated by Exposure: Skin, eye and pulmonary 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:	234°F (112 °C)
Flash Point Method Used:	Closed Cup
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.

Effective Date: 7/8/09

7. HANDLING AND STORAGE

Signal Word: Warning!

Precautions: Can cause skin irritation, eye irritation, allergic respiratory reaction, and allergic skin reaction. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated breathing of vapor or mist. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling.

Other Handling Information: Nuisance dust may be generated when sanding or sawing cured material.

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:	Amber
Physical State:	Liquid
Solubility in Water:	Insoluble
Vapor Pressure:	2.5 mm Hg at 60°C (140 °F)
Specific Gravity:	1.15 - 1.17 (water = 1)
Boiling Point:	Not Determined
Evaporation Rate:	Not Determined
Vapor Density:	Not Determined
VOC:	46.4 g/L
pH:	Not Determined
Coefficient of water/oil:	Not Determined

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: May cause allergic skin reaction and respiratory sensitivity in some people.

Effective Date: 7/8/09

Skin Irritation: Irritant.**Eye Irritation:** Irritant.**Mutagenicity:** Butyl glycidyl ether (BGE) was found to be mutagenic in a number of in vitro tests. In vivo studies have shown mixed mutagenic results.

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:** Not Regulated**IATA: Non-Bulk****Proper Shipping Name:** Not Regulated**IMDG: Non-Bulk****Proper Shipping Name:** Not Regulated**TDG: Non-Bulk****Proper Shipping Name:** Not Regulated

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 304 - CERCLA:** This product does not contain any chemicals regulated under Section 304 (40 CFR 302) as hazardous chemicals for emergency release notification ("CERCLA" List).**SARA Title III: Section 311/312 - Hazard Communication Standard (HCS):** This product is not regulated under Section 311-312 (40 CFR 370).**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:** All chemical components of this product are in compliance with TSCA inventory requirements.**TSCA Section 12(b) - Export Notification:** This product does not contain any chemical(s) that are subject to a Section 12(b) export notification.

International Regulations:

Australian Inventory Status: This product contains only chemicals which are currently listed on the Australian Inventory of Chemical Substances.

Canadian Inventory Status: This product contains only chemicals that are currently listed on the Canadian Domestic Substance List.

Canadian WHMIS: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. D2A, D2B

European Inventory Status (EINECS): This product contains only chemicals that are currently listed on the European Inventory of Existing Commercial Chemical Substances (EINECS).

Japanese Inventory Status: This product contains one or more chemicals currently not on the Japanese Ministry of International Trade and Industry List of Existing and New Chemical Substances.

State Regulations:

California Proposition 65: This product does not contain any chemicals currently on the California list of Known Carcinogens and Reproductive Toxins.

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

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: Polyester Resin

CAS Number: Held confidential by our supplier

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Phosphorous acid, triphenyl ester

Common Name: Triphenyl phosphite

CAS Number: 101-02-0

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Oxirane, (Butoxymethyl)-

Common Name: Butyl glycidyl ether

CAS Number: 2426-08-6

Comment: Hazardous Substance

16. OTHER INFORMATION

MSDS No:	6069
Reason Issued:	update for WHMIS 7/09
Prepared By:	Matt Austin

Effective Date: 7/8/09

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4917 Dawn Avenue
 East Lansing, MI 48823-5691

8am to 5pm Phone: (517) 351-5900
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Effective Date: 8/8/05

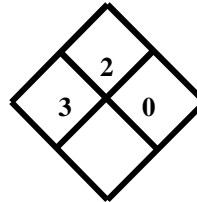
Material Safety Data Sheet

MSDS No: 6068

1. PRODUCT IDENTIFICATION

Trade Name: Ren 3266

Chemical Family: Amine



NFPA RATING

Health:	3
Flammability:	2
Reactivity:	0
Personal Protection:	

HMIS RATING

Synonyms:

RP 3266 Hardener

Intended Use or Product Type: Casting hardener

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				
*	112-24-3 Common Name:	1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-Triethylenetetramine	NE	NE	NE	NE	NE	NR	NR	NR
*	68082-29-1 Common Name:	Fatty acids, C18-unsatd., dimers, polymers with tall-oil fatty acids and triethylenetetramine Polyamide Resin	NE	NE	NE	NE	NE	NR	NR	NR
*	68441-70-3 Common Name:	1,2-Ethanediamine, N,N'-Bis(2-Aminoethyl)-, Propoxylated Propoxylated triethylene tetramine	NE	NE	NE	NE	NE	NR	NR	NR
*	70955-17-8 Common Name:	Aromatic Hydrocarbons, C12 - C20 Aromatic hydrocarbons	NE	NE	NE	NE	NE	NR	NR	NR
*	8002-09-3	Oils, Pine	NE	NE	NE	NE	NE	NR	NR	NR

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

3. HAZARDS IDENTIFICATION

Emergency Overview: Combustible. Corrosive - Causes eye burns and skin irritation.



Effective Date: 8/8/05

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

Chronic: This product contains aromatic hydrocarbons. Similar aromatic oils have been found to produce skin cancer in animals. Compounds naturally present in this product are known to cause cancer in animals.

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: Corrosive - causes eye burns. Causes skin irritation.

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:	193°F (89 °C)
Flash Point Method Used:	Closed Cup
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.

7. HANDLING AND STORAGE

Signal Word: Danger!

Precautions: Combustible. Keep away from heat and flame. Corrosive - causes eye burns. Can cause skin irritation. Do not get in eyes. Avoid breathing vapor or mist. Avoid contact with skin and clothing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling.

Effective Date: 8/8/05

Other Handling Information: Nuisance dust may be generated when sanding or sawing cured material.

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:	Amber
Odor:	Pine
Physical State:	Liquid
Solubility in Water:	Slight
Vapor Pressure:	1.93 mm Hg at 71°C (160 °F)
Specific Gravity:	0.95 - 0.99 (water = 1)
Boiling Point:	Not Determined
Evaporation Rate:	Not Determined
Vapor Density:	Not Determined
VOC:	172.524 g/L
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.

11. TOXICOLOGICAL INFORMATION

Skin Irritation: Irritant.

Eye Irritation: Corrosive. Causes burns.

Effective Date: 8/8/05

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: All chemical components of this product are in compliance with TSCA inventory requirements.

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: 2-Propenoic Acid, Ethyl Ester

Common Name: Ethyl acrylate

CAS Number: 140-88-5

Percent in Composition: 0.002 % 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: Fatty acids, C18-unsatd., dimers, polymers with tall-oil fatty acids and triethylenetetramine

Effective Date: 8/8/05

Common Name: Polyamide Resin
CAS Number: 68082-29-1
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-
Common Name: Triethylenetetramine
CAS Number: 112-24-3
Comment: Hazardous Substance

Chemical Name: 1,2-Ethanediamine, N,N'-Bis(2-Aminoethyl)-, Propoxylated
Common Name: Propoxylated triethylene tetramine
CAS Number: 68441-70-3
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Aromatic Hydrocarbons, C12 - C20
Common Name: Aromatic hydrocarbons
CAS Number: 70955-17-8
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Oils, Pine
CAS Number: 8002-09-3
Comment: Not on Pennsylvania Hazardous Substance List

16. OTHER INFORMATION

MSDS No: 6068
Approved By: Dianne Blessing
Title: EH&S Specialist

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