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Effective Date: 10/12/04

Material Safety Data Sheet

MSDS No: 6204

1. PRODUCT IDENTIFICATION

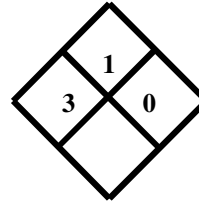
Trade Name: RenGel 177-144

Chemical Family: Epoxy

Synonyms:

TDT 177-144 Resin

Intended Use or Product Type: Styrene resistant surface coat



NFPA RATING

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

HMIS RATING

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
*	28064-14-4	Phenol, polymer with formaldehyde, glycidyl ether Epoxy Phenol Novolac 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

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* = 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: Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury. 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 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:	> 200°F (> 93 °C)
Flash Point Method Used:	Estimated
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:	Gray
Odor:	Mild
Physical State:	Filled Paste
Solubility in Water:	Negligible
Vapor Pressure:	Not Determined
Specific Gravity:	1.58 (water = 1)
Boiling Point:	Not Determined
Evaporation Rate:	Not Determined
Vapor Density:	Not Determined
VOC:	228.767 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

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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.

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:

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Chemical Name: Quartz (SiO₂)
Common Name: Crystalline silica
CAS Number: 14808-60-7
Percent in Composition: 0.11 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer.

Chemical Name: Oxirane, (phenoxymethyl)-
Common Name: Phenyl glycidyl ether
CAS Number: 122-60-1
Percent in Composition: 0.0001 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer.

Chemical Name: Uranium
CAS Number: 7440-61-1
Percent in Composition: 0 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer.

Chemical Name: Thorium
CAS Number: 7440-29-1
Percent in Composition: 0 % 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: 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: Silicon Carbide (SiC)
CAS Number: 409-21-2
Comment: Hazardous Substance

Chemical Name: Phenol, polymer with formaldehyde, glycidyl ether
Common Name: Epoxy Phenol Novolac
CAS Number: 28064-14-4
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Zircon
CAS Number: 14940-68-2
Comment: Not on Pennsylvania Hazardous Substance List

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

16. OTHER INFORMATION

MSDS No: 6204
Approved By: Dianne Blessing
Title: EH&S Specialist

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