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1. Product and Company Identification

ProductName: Sakrete Rapid Setting Epoxy Resin (Part A) Product Use: Doweling

Supplier Identification: Sakrete of North America 625 Griffith Rd., Ste 100 Charlotte, NC 28217 866-725-7383 Emergency Phone: CHEMTREC Day or Night 1-800-424-9300 [USA] / +1 703-527-3887 [CAN]

2. Hazards Identification (Part A)

GHS Classification			
Health	Physical	Environmental	
Skin Irritant Cat 2 Eye Irritant Cat 2B Carcinogen Cat 2	Not Classified	Toxic to Aquatic Life Cat-2	

GHS label:

Warning:



Eye Irritant Skin Irritant

Emergency Overview

May cause skin sensitization Causes skin and eye irritation

May cause cancer

Wash skin thoroughly after handling

Avoid breathing fume/gas/mist/vapors/spray

Wear protective gloves/ protective clothing/ eye protection/ face protection

Use outdoors or in a well-ventilated area

Primary Route of Exposure

Eyes, skin and oral

Carcinogenicity

This product or one of its ingredients present at 0.1% or more IS listed as a carcinogen or suspect carcinogen by NTP, IARC, Prop 65 or OSHA.

This product contains titanium dioxide which IARC has classified as a Group 2B carcinogen (possibly carcinogenic to humans). Evidence is based on sufficient animal testing as a result of long-term inhalation at

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high concentrations of respirable amounts of titanium dioxide. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification Is not relevant. (Note: sanding of this product will create a possible dust hazard).

This product contains crystalline silica (quarts sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of this product will create a possible silica dust hazard)

3. Composition/Information on Ingredients (Part A)

CAS Number	Content%	Chemical Name
25085-99-8	60 -80	Diglycidyl Ether of Bisphenol A
68460-21-9	5 -15	Trimethylol ethane triglycidyl ether
13463-67-7	1 - 5	Titanium Dioxide
14808-60-7	20 -40	Quartz Silica Sand (Crystalline Silica)

4. First Aid Measures (Part A)

Inhalation: Move to fresh air; give oxygen if breathing is difficult. Call a physician if symptoms persist. Eyes: Immediately flush eyes with plenty of water for at least 15minutes. Call a physician if symptoms persist. Skin: Remove contaminated clothing. Wash with mild soap and water. Get medical attention if skin irritation or dermatitis persists.

Ingestion: Give plenty of water. DO NOT induce vomiting. Call a physician immediately.

Other: Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure. If sensitization occurs, future contact with the material should be avoided.

5. Fire Fighting Measures (Part A)

Flash Point: N/D Flammable Limits: N/A

Extinguisher Media

Carbon Dioxide, Dry Chemical, Water Fog

Unusual Fire and Explosion Hazard

None known. Thermal Decomposition can be formed.

Special Fire Fighting Procedures

Firefighters must wear self-contained breathing apparatus and full protective clothing to prevent contact with toxic and/or irritating fumes.

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6. Accidental Release Measures (Part A)

Personal Precautions:

Avoidall personal contact. enenclosed areas, cleanup personnel should wear self-contained breathing apparatus.

Environmental Precautions

Cover spills with sawdust, vermiculite, or other absorbent material to minimize spreading of the material before collecting.

7. Handling and Storage (Part A)

Handling: Avoid contact with eyes, skin and clothing. Avoid inhalation of vapors. Use with adequate ventilation. Use appropriate personal protection equipment (Section 8). Wash thoroughly after handling. Storage: Store in a cool dry place away from direct sunlight. Keep from freezing. Recommended storage temperature ranges in between 4 °C and 35 °C (40°F and 95° F).

8. Exposure Control and Personal Protection (Part A)

Exposure Guidelines

Component	CAS#	OSHA PEL	TLV
Titanium Dioxide	13463- 67-7	15 mg/m ³	10 mg/m ³
Quartz Silica Sand (Crvstalline Silica)	14808- 60-7	0.1mg/m3	0.025 mg/mJ

Engineering Measures: Use local and general exhaust ventilation to maintain airborne concentrations below TLV. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it.

Personal Protective

Equipment Respiratory

Protection

None normally required. Use a NIOSH approved organic vapor chemical cartridge respirator when air movement is inadequate to control vapor build-up.

Eye/Face Protection

Wear splash proof chemical goggles/ full face shield if there is a potential for splashing.

Skin / Body Protection

Wear Suitable gloves (neoprene, nitrile rubber or PVC) and protective clothing to mitigate exposure.

Other Protective Clothing or Equipment

Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

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9. Physical and Chemical Properties (Part A)

Physical State: Liquid
Appearance: White
Evaporation Rate: N/D

Odor: Slight Odor

Odor Threshold: N/D
Melting/Freezing Point: N/D
Boiling Point and Range N/D
Solubility inWater: Insoluble
Specific Gravity(g/cc): N/D
Vapor Density(air=1): N/D
Vapor Pressure: N/D

VOC Content: See section 9 of part B for VOC content

pH: N/D Boiling Point: N/D

10. Stability and Reactivity (Part A)

Stability: Stable

Thermal Decomposition: CanyieldCO,CO2andorganicNitrogencompounds.

Incompatibility: Strong acids, peroxides, and other oxidizing agents

Conditions to avoid: Exposure to excessive heat and storage above 35'C (95'F) will shorten shelf

life.

11. Toxicological Information (Part A)

Not Determined

Acute Dermal Toxicity:

Not Determined

Acute Inhalation Toxicity:

Not Determined

Skin Irritation: Irritating to skin

The product has not been tested. The statement has been derived from the properties of the individual components.

Eye Irritation: Irritating to eyes.

The product has not been tested. The statement has been derived from the properties of the individual components.

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Respiratory Irritation:

Inhalation of vapors or mists may cause irritation to the respiratory system.

Sensitization:

May cause allergic skin reaction and irritation to the respiratory system.

The product has not been tested. The statement has been derived from the properties of the individual components.

STOT-single exposure

Not Determined

STOT -Repeated Exposure

Not Determined

Carcinogenicity Classification:

Titanium Dioxide:

IARC Group 2B:Possibly carcinogenic to humans.

This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Quartz Silica Sand (Crystalline Silica):

IARC Group1:Known human carcinogen based on human evidence.

NTP (National Toxicology Program) has classified Crystalline Silica as a known human carcinogen.

12. Ecological Information (Part A)

Fish:

Diglycidyl Ether of Bisphenol A:

Fathead minnow/LC50 (96hrs):>3.1mg/l

Aquatic Invertebrates:

Diglycidyl Ether of Bisphenol A:

Water Flea Daphnis/EC 50 (48hrs): > 1.4mg/l

Algae:

No Data Available

Microorganisms:

Diglycidyl Ether of Bisphenol A:

Bacteria, (Growth inhibition)/IC50 (18hrs): > 42.6mg/l

Mobility:

Considering the use of the substance, it is unlikely that significant environmental exposure in the air or water will arise.

13. Disposal Considerations (Part A)

If the material as supplied becomes a waste, dispose in accordance with federal, state and local regulations.

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14. Transportation Information (Part A)

This product is not regulated as a hazardous material for transportation.

15. Regulatory Information (Part A)

HMIS Rating		
Health	2	
Flammability	1	
Physical Physical	<u>0</u>	
Hazard PPE	В	

NFPA Rating



Hazard Rating: 0 = minimal, 1 = Slight, 2 = moderate, 3 = severe, 4 = extreme

Federal Regulations

CERCLA RQ

SARA Title 311/312 Not Determined

CA Prop 65 This product contains a chemical or chemicals known to the State of

California to cause cancer, birth defects or other reproductive harm.

TSCA Listed or Exempt

State Regulations:

State RTK NJ, MA, PA

CAS# Chemical Name

Diglycidyl Ether of Bisphenol A

13463-67-7 Titanium Dioxide

64741-65-7 Naphtha, Petroleum, Heavy Alkylate (NJ,PA)

16. Other Information (Part A)

Hazard Communication: This SOS has been prepared in accordance with the federal OSHA Hazard Communication Standard

To the best of our knowledge, the information contained herein is accurate. However, we do not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Additional information is available upon request.

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1. Product and Company Identification

Product Name: Sakrete Rapid Setting Epoxy Hardener (Part 8) Product Use: Doweling

Supplier Identification: Sakrete of North America 625 Griffith Rd., Ste 100 Charlotte, NC 28217

Contact Phone: 866-725-7383

Emergency Phone: Chemtrec: 800-424-9300

2 Hazards Identification (Part B)

GHS Classification

Health	Physical	Environmental
Skin Corrosion Cat 1B	Not Classified	Toxic to Aquatic Life Cat-2
Serious Eye Damage Cat 1		
Carcinogen Cat 1		
Reproductive Tox Cat 2		
Acute Toxicity Cat 4		

GHS Label:

Danger:



Corrosive to skin and eyes



Acute Oral Toxicity



Carcinogen Reproductive toxicity

Emergency Overview

Causes skin burns

Causes severe eye damage

May cause cancer

Suspected of damaging fertility

Harmfulif swallowed

Wash skin thoroughly after handling

Avoid breathing fume/gas/mist/vapors/spray

Wear protective gloves/ protective clothing/ eye protection/ face protection

Use outdoors or in a well-ventilated area

Avoid contact during pregnancy/while nursing

Primary Route of Exposure

Eyes, skin and oral

Carcinogenicity

This product or one of its ingredients present at 0.1% or more IS listed as a carcinogen or suspect carcinogen by NTP, IARC, Prop 65 or OSHA.

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This product contains titanium dioxide which IARC has classified as a Group 28 carcinogen (possibly carcinogenic to humans). Evidence is based on sufficient animal testing as a result of long-term inhalation at high concentrations of respirable amounts of titanium dioxide. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of this product will create a possible dust hazard).

This product contains crystalline silica (quarts sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of this product will create a possible silica dust hazard)

3. Composition/Information on Ingredients (Part B)

CAS Number 68605-86-7 140-31-8 100-51-6 90-72-2 13463-67-7 84852-15-3 4736-60-1 14808-60-7	Content % 20 -40 7 - 15 5 - 10 1 - 5 0.1 - 1 10 -20 1 - 5 0 1 - 1	Chemical Name Polyamido Amine n-aminoethylpiperazine Benzyl Alcohol Tris-2,4,6(dimethylaminomethyl)phenol Titanium Dioxide Nonylphenol Ethyltriphenylphosphonium iodide Quartz Silica Sand (Crystalline Silica)
14808-60-7	0.1 - 1	Quartz Silica Sand (Crystalline Silica)
Proprietary	20 -40	Non Hazardous

4. First Aid Measures (Part B)

hhalation: Move to fresh air; give oxygen if breathing is difficult. Call a physician if symptoms persist. Eyes: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician if symptoms persist. Skin: Remove contaminated clothing. Wash with mild soap and water. Get medical attention if skin irritation or dermatitis persists.

Ingestion: Give plenty of water. DO NOT induce vomiting. Call a physician immediately.

Other: Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure. If sensitization occurs, future contact with the material should be avoided.

5. Fire Fighting Measures (Part B)

Flash Point: N/D Flammable Limits: N/D

Extinguisher Media

Carbon Dioxide, Dry Chemical, Water Fog

Unusual Fire and Explosion Hazard

None known. Thermal Decomposition can be formed.

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Special Fire Fighting Procedures

Firefighters must wear self-contained breathing apparatus and full protective clothing to prevent contact with toxic and/or irritating fumes.

6. Accidental Release Measures (Part B)

Personal Precautions:

Avoidall personal contact. Inenclosed areas, cleanup personnel should wear self-contained breathing apparatus.

Environmental Precautions

Cover spills with sawdust, vermiculite, or other absorbent material to minimize spreading of the material before collecting.

7. Handling and Storage (Part B)

Handling: Avoid contact with eyes, skin and clothing. Avoid inhalation of vapors. Use with adequate ventilation. Use appropriate personal protection equipment (Section 8). Wash thoroughly after handling. Storage: Store in a cool dry place away from direct sunlight. Keep from freezing. Recommended storage temperature ranges in between 4 $^{\circ}C$ and 35 $^{\circ}C$ (40 $^{\circ}F$ and 95 $^{\circ}F$).

8. Exposure Control and Personal Protection (Part B)

Exposure Guidelines

Component	CAS#	OSHA PEL	TLV
Quartz Silica Sand (Crystalline Silica)	14808-60-7	0.1mg/m3	0.025 mg/m3
Titanium Dioxide	13463-67-7	15 mg/m3	10 mg/m ³
Benzyl Alcohol	100-51-6	50ppm (Ceiling)	100 mg/m ³

Engineering Measures: Use local and general exhaust ventilation to maintain airborne concentrations below TLV. Suitable respiratory equipment should be used incases of insufficient ventilation or where operational procedures demand it.

Personal Protective

Equipment_Respiratory

Protection

None normally required. Use a NIOSH approved organic vapor chemical cartridge respirator when air movement is inadequate to control vapor build-up.

Eye/Face Protection

Wear splash proof chemical goggles/ full face shield if there is a potential for splashing.

Skin / Body Protection

Wear Suitable gloves (neoprene, nitrile rubber or PVC) and protective clothing to mitigate exposure.

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Other Protective Clothing or Equipment

Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

9. Physical and Chemical Properties (Part B)

Appearance: Black Paste

Evaporation Rate: N/D

Odor: Slight Odor
Solubility in Water: Insoluble
Specific Gravity(g/cc): N/D
Vapor Density: N/D
Vapor Pressure: N/D

VOC Content: 0 g/L (tested per EPA CFR 40, Part 63, Subpart PPPP, Appendix A)

9 g/L (tested per EPA CFR 40, Part 60, method 24)

pH: N/D Boiling Point: N/D

10. Stability and Reactivity (PartB)

Stability: Stable

Thermal Decomposition: Can yield CO, CO2 and organic Nitrogen compounds.

Incompatibility: Strong acids, peroxides, and other oxidizing agents

Conditions to avoid: Exposure to excessive heat and storage above 35"C (95"F) will shorten shelf

life.

11. Toxicological Information (Part B)

Acute Oral Toxicity:

Harmful if swallowed

The product has not been tested. The statement has been derived from the properties of the individual components.

Acute Dermal Toxicity:

Not Determined

Acute Inhalation Toxicity:

Not Determined

Skin Irritation:

Corrosive to skin

The product has not been tested. The statement has been derived from the properties of the individual components.

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Eye Irritation:

Severe damage to eyes.

The product has not been tested. The statement has been derived from the properties of the individual components .

Respiratory Irritation:

Inhalation of vapors or mists may cause lung irritation to the respiratory system.

Sensitization

May cause allergic skin reaction and irritation to the respiratory system.

The product has not been tested. The statement has been derived from the properties of the individual components .

STOT-single exposure

Not Determined

STOT - Repeated Exposure

CNS, Skin

Carcinogenicity Classification:

Quartz Silica Sand (Crystalline Silica):

IARC Group1:Known human carcinogen based on human evidence.

NTP (National Toxicology Program) has classified Crystalline Silica as a known human carcinogen.

Titanium Dioxide:

IARC Group 28: Possibly carcinogenic to humans.

This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

12. Ecological information (Part B)

Acute Toxicity for:

Fish:

Polyamide Resin:

Zebrafish /LC50 (96hrs): >5.0mg/1

Aquatic Invertebrates:

Polyamide Resin:

Water Flea Daphnis/EC 50 (48hrs): > 7.07mg/l

Algae:

No Data Available

Microorganisms:

No Data Available

Mobility:

Considering the use of the substance, it is unlikely that significant environmental exposure is the air or water will arise.

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13. Disposal Considerations (Part B)

If the material as supplied becomes a waste, dispose in accordance with federal, state and local regulations.

14. Transportation Information (Part B)

DOT (US)
CARTRIDGE: Limited Quantity, LTD QTY

*BULK: AMINES, LIQUID, CORROSIVE, N.O.S. (aminoethylpiperazine, 4-Nonylphenol, branched), Class 8, UN 2735, PG III

*Bulk packaging in quantities of 1.3 gallons (net) or less are packaged in accordance with the limited quantity exception.

IATA/ICAO

CARTRIDGE/BULK: AMINES, LIQUID, CORROSIVE, N.O.S. (aminoethylpiperazine, 4-Nonylphenol, branched), Class 8, UN 2735, PG III

IMDG

CARTRIDGE/BULK: AMINES, LIQUID, CORROSIVE, N.O.S. (aminoethylpiperazine, 4-Nonylphenol, branched), Class 8, UN 2735, PG III

15. Regulatory Information (Part B)

HMISRating	
Health	*2
Flammability	1
<u>Physical</u>	0
Hazard	G



Hazard Rating: 0 = minimal,1 = Slight, 2 = moderate, 3 = severe, 4 = extreme

Federal Regulations

SARA Title 311/312 Chronic Health Hazard (Bisphenol A)

CA Prop 65 This product does contain a chemical or chemicals known to the

State of California to cause cancer, birth defects or other

reproductive harm.

TSCA Listed or Exempt

State Regulations:

State RTK NJ, MA, PA

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<u>CAS#</u> 14808-60-7 140-31-8 <u>Chemical Name</u> Quartz Silica Sand (Crystalline Silica) n-aminoethylpiperazine

16. Other Information

Hazard Communication: This SDS has been prepared in accordance with the federal OSHA Hazard Communication Standard

To the best of our knowledge, the information contained herein is accurate. However, Adhesives Technology Corp. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Additional information is available upon request.