

# Safety Data Sheet

Date Issued: 1/25/17

Version: 1.0

## 1. CHEMICAL PRODUCTS AND COMPANY IDENTIFICATION

**Product Names/Trade Names:** ProKrete HD, RT, SL, CM Resins, KreteFill Resin, FlexKrete Resin, BioKrete Resin

**Chemical Family:** Polyol Oil Emulsion

**Manufacturer's Name:** ProREZ Coatings, LLC  
PO BOX 153  
Cromwell, CT 06416-0153 USA  
General No.: (877) 511-3456 (8:00am to 5:00pm Eastern Time)

**Company 24 Hour Emergency Response Information:** CHEMTEL: 1-800-255-3924

Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

## 2. HAZARDS IDENTIFICATION

**Emergency Overview:** Caution! The toxicological properties of this material have not been fully investigated. May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

Target Organs: No data found.

### Classification of the substance

Eye Irrit. 2B H320 (Eye Irritation) Causes eye irritation

NON HAZARDOUS; NON DANGEROUS GOODS

Non-dangerous goods for transport according to the ADG code.

Non-hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) regulations 2001 and NOHSC.

Not classified as hazardous according to Regulation (EC) No 1272/2008.

Directive 67/548/EEC

Symbol: Not classified as hazardous under this directive.

Risk Phrases: Not classified as hazardous under this directive.

Safety Phrases: Not classified as hazardous under this directive.

### Label Elements

Hazardous components that must be listed on the label:

Contains cement and silica/quartz

**Signal Word:** Warning

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## Pictograms:



## Hazard Statements:

H320 Causes eye irritation

H315 Causes skin irritation

## Precautionary Statements

P264 Wash exposed areas thoroughly after handling

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P303+P352 IF ON SKIN (or hair): Wash with plenty of soap and water.

Potential Acute Health Effects: Repeated exposure may result in slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

**General Information:** This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent damage. Repeated or prolonged contact causes sensitization, asthma and eczemas.

**Read the entire SDS for a more thorough evaluation of the hazards.**

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	% By Weight	CAS Number
Polyol Emulsion: Contains Non-Hazardous Ingredients	99%	Not Applicable

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## 4. FIRST-AID MEASURES

**Eye contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

**Skin Contact:** Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:** Rinse mouth. Drink plenty of water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

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## 5. FIRE-FIGHTING MEASURES

**Suitable Fire Extinguishing Media:** Dry chemical. Water spray. Water fog. Foam.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Specific hazards: Not available

**Precautions for fire fighters:** Appropriate breathing apparatus may be required. Cool endangered containers with water in case of fire. Do not allow quenching water into sewers or waterways. Wear pressure-demand self-contained breathing apparatus (MSHA/NIOSH-approved or equivalent) and full protective gear.

**Flammable Limits:** Not available.

**Explosion Limits:** Not Available

**Auto-Ignition Temperature:** 449°C (840.2°F)

**Flash Points:** Open Cup: 282°C (540°F).

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** No action shall be taken involving any personal risk or without suitable training.

Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

**Environmental Precautions:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform authorities if the product has caused environmental pollution (sewers, drains, waterways or soil).

**Methods for Cleaning up:** Stop leak if without risk. Move containers from spill area. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Note: see section 1 for emergency contact information and section 13 for waste disposal.

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## 7. HANDLING AND STORAGE

**Handling:** Put on appropriate personal protective equipment, PPE (see Section 8). Eating and drinking should be prohibited in areas where this material is handled, stored and processed. Remove contaminated PPE or clothing, wash hands and face before eating and drinking. Use only in area provided with appropriate exhaust ventilation. Empty containers retain product residue and can be hazardous. Do not get in eyes, skin or clothing. Do not ingest. Avoid release to the environment.

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**Storage:** Store between 15-27°C (60-80°F) in accordance with local regulations away from sources of heat, ignition, and direct sunlight. Store in original container. Keep in a dry, well-ventilated area, and away from incompatible materials (see section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled, unapproved or reactive containers. Use appropriate containment to avoid environmental contamination.

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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Special Note for Exposure Control: Consult local authorities for acceptable exposure limits.**

**OSHA PEL (TWA):** Not Determined

**ACGIH TLV (TWA):** Not Determined

**NIOSH REL (TWA):** Not Determined

**Engineering measures:** Work in well-ventilated area. Provide natural or explosion-proof fan to ensure adequate ventilation, especially in confined area. Avoid contact with skin, eyes, and clothing.

**Environmental exposure controls:** Construct a dike to prevent spreading. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Hygiene Measures:** Wash hands, forearms and face thoroughly after handling chemical products, before eating and drinking, smoking or using the lavatory and at the end of the working period. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### **Personal Protection:**

**Respiratory** - In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Eyes** – Splash proof safety glasses.

**Skin** - Rubber or plastic apron. Rubber or plastic gloves. Long sleeved clothing or wear protective sleeves. Remove and wash contaminated clothing before re-use.

**Other protective equipment information** - Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Neoprene gloves. PVC disposable gloves. Nitrile rubber. Butyl rubber. Impervious gloves. (The breakthrough time of the selected glove(s) must be greater than the intended use period.)

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form:</b>	Liquid
<b>Odor:</b>	Soap Like
<b>Color:</b>	Various colors
<b>PH Value:</b>	7
<b>Boiling Point:</b>	313°C (595.4°F)
<b>Vapor Pressure (25°C):</b>	Not Applicable
<b>Density:</b>	8.70 lb/US gallon
<b>Solubility in water:</b>	Insoluble
<b>Evaporation Rate (Butyl Acetate = 1):</b>	Not Applicable
<b>Volatile Organic Compounds:</b>	Nil

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## 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal conditions. Hazardous reactions will not occur.

**Conditions to avoid:** Excessive heat.

**Materials to avoid:** Not Available.

**Hazardous decomposition products:** Not Available.

**Hazardous polymerization:** Under normal conditions hazardous polymerization will not occur.

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## 11. TOXICOLOGICAL INFORMATION

**Routes of Entry:** Absorbed through skin. Eye contact. Ingestion.

**Toxicity to Animals:** LD50: Not available. LC50: Not available.

**Chronic Effects on Humans:** Not available.

**Other Toxic Effects on Humans:** Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

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## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

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## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose in accordance with federal, state and local regulations.

The generation of waste should be avoided or minimized wherever possible. Empty containers should be taken to an approved waste-handling site for recycling or disposal. Incineration or landfill should only be considered when recycling is not feasible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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## 14. TRANSPORT INFORMATION

**DOT Classification:** Not Regulated, Not a hazardous material (United States).

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## 15. REGULATORY INFORMATION

Country	Regulatory List	Notification
USA	TSCA	Included on Inventory
EU	EINECS	Included on Inventory
Canada	DSL	Included on Inventory

### U.S. Federal Regulations:

**OSHA:** This product is considered non-hazardous.

### CERCLA SARA Hazard Category:

**Section 311 AND 312** - This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: None

**Section 313** - This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: None

### U.S. State Regulations:

**California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)** - This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other reproductive harm.

**Canadian WHMIS:** Not Hazardous

**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.**

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## 16. OTHER INFORMATION

### Hazardous Material Information System (HMIS):

<i>Scale 0-4</i>		<i>NFPA</i>	<i>HMIS</i>
4=Severe Hazard	Health	1	1
3=Serious Hazard	Flammability	1	1
2=Moderate Hazard	Reactivity	0	0
1=Slight Hazard			
0=Minimal Hazard			

THE INFORMATION AND RECOMMENDATIONS PRESENTED HEREIN ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. USER MUST CONDUCT THEIR OWN TESTS TO DETERMINE THE SUITABILITY OF THESE PRODUCTS FOR THEIR PARTICULAR PURPOSES AND USAGE. BECAUSE OF NUMEROUS FACTORS AFFECTING RESULTS, PROREZ COATINGS, LLC AND ITS AFFILIATION MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PURPOSE, OTHER THAN MATERIAL CONFORMS TO OUR APPLICABLE CURRENT SPECIFICATIONS. PROREZ COATINGS, LLC ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE ON THE INFORMATION CONTAINED IN THIS SAFETY DATA SHEET.

END OF DATA SHEET

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Date Issued: 1/25/17

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## 1. CHEMICAL PRODUCTS AND COMPANY IDENTIFICATION

**Product Names/Trade Names:** ProKrete HD, RT, SL, UTC, CM Hardeners, KreteFill Hardener, FlexKrete Hardener, ProUrea Flex Hardener, ProUrea HF Hardener

**Chemical Family:** Aromatic Isocyanates

**Manufacturer's Name:** ProREZ Coatings, LLC  
PO BOX 153  
Cromwell, CT 06416-0153 USA  
General No.: (877) 511-3456 (8:00am to 5:00pm Eastern Time)

**Company 24 Hour Emergency Response Information:** CHEMTEL: 1-800-255-3924

Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

## 2. HAZARDS IDENTIFICATION

**Emergency Overview:** DANGER - CONTAINS DIPHENYLMETHANE DIISOCYANATE (MDI)  
Diphenylmethane diisocyanate (CAS No. 101-68-8), commonly referred to as MDI. Inhalation of MDI mists or vapors may cause respiratory irritation, breathlessness, chest discomfort, and reduced pulmonary function. Overexposure well above the OSHA PEL may result in bronchitis, bronchial spasms and pulmonary edema. Long term exposure to MDI has been reported to cause lung damage, including reduced lung function which may be permanent. Acute or chronic overexposure to MDI may cause sensitization in some individuals resulting in an allergic respiratory reactions including wheezing, shortness of breath, and difficulty breathing.

### Classification of the substance

Acute Tox.	4	(Inhalation - mist) Acute toxicity
Eye Dam./Irrit.	2B	Serious eye damage/eye irritation
Skin Corr./Irrit.	2	Skin corrosion/irritation
Skin Sens.	1B	Skin sensitization
Resp. Sens.	1	Respiratory sensitization
Carc.	2	Carcinogenicity

### Label Elements

Hazardous components that must be listed on the label:  
Contains 4,4'-Diphenylmethane Diisocyanate

**Signal word:** Danger

**Pictograms:**





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## Hazard Statements:

- H320 Causes eye irritation.
- H315 Causes skin irritation.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H373 May cause damage to organs (Olfactory organs) through prolonged or repeated exposure (inhalation).

## Precautionary Statements (Prevention)

- P270 Wear protective gloves/protective clothing/eye protection/face protection.
- P271 Use only outdoors or in a well-ventilated area.
- P260 Do not breathe dust/gas/mist/vapors.
- P201 Obtain special instructions before use.
- P261 Avoid breathing mist.
- P202 Do not handle until all safety precautions have been read and understood.
- P2 4 In case of inadequate ventilation wear respiratory protection.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P264 Wash with plenty of water and soap thoroughly after handling.

## Precautionary Statements (Response)

- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor/physician.
- P314 Get medical advice/attention if you feel unwell.
- P303+P361 IF ON SKIN (or hair): Wash with plenty of soap and water.
- P333+P311 If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician.
- P362+P364 Take off contaminated clothing and wash before reuse.
- P332+P313 If skin irritation occurs: get medical advice/attention.
- P337+P311 If eye irritation persists: Call a POISON CENTER or doctor/physician.

Information on MDI: Results from a lifetime inhalation study in rats indicate that MDI aerosol was carcinogenic at 6mg/m<sup>3</sup>, the highest dose tested. This is well above the recommended TLV of 5 ppb (0.05 mg/m<sup>3</sup>). Only irritation was noted at the lower concentration of 0.2 and 1 mg/m<sup>3</sup>. No birth defects or teratogenic effects were reported in a teratology study with rats exposed to 1, 4, and 12 mg/m<sup>3</sup> polymeric MDI for 6 hr/day on days 6-15 of gestation. Embryotoxicity and fetotoxicity was reported at the top dose in the presence of maternal toxicity.

Persons with history of respiratory disease or hypersensitivity should not be exposed to this product. An animal study indicated that MDI may induce respiratory hypersensitivity following dermal exposure. Medical supervision of all employees who handle or come into contact with isocyanates is recommended. Pre-employment and periodic medical examinations with respiratory function tests (FEV<sub>1</sub>, FVC as a minimum) are suggested.

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Persons with asthmatic conditions, chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with isocyanates. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to isocyanates, further exposure is not recommended.

Contact may aggravate pulmonary disorders.

**General Information:** This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent damage. Repeated or prolonged contact causes sensitization, asthma and eczemas.

**Read the entire SDS for a more thorough evaluation of the hazards.**

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	% By Weight	CAS Number
Diphenylmethane-4,4'-diisocyanate (MDI)	60%	101-68-8
Polymeric MDI	<40%	9016-87-9
MDI Mixed Isomers	<5%	26447-40-5

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## 4. FIRST-AID MEASURES

**General advice:** Seek medical advice.

**Eye contact:** Rinse immediately with plenty of water for at least 15 minutes.

**Skin Contact:** Immediately remove any extraneous chemical, if possible without delay. Take off contaminated clothing and shoes immediately. Wash body off with soap and plenty of water.

**Ingestion:** Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position and turn victim's head to the side. **Do not induce vomiting.**

**Inhalation:** Move to fresh air. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

### Note to physician:

Antidote: Specific antidotes or neutralizers to isocyanates do not exist.

Treatment: Treatment should be supportive and based on the judgment of the physician in response to the reaction of the patient.

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## 5. FIRE-FIGHTING MEASURES

**Suitable Fire Extinguishing Media:** Dry chemical, Carbon dioxide, Foam

**Flammable Limits:** Not available.

**Explosion Limits:** Not Available

**Auto-Ignition Temperature:** 240°C (464°F)

**Flash Points:** 200°C (392°F) [DIN 51758 EN 22719 (Pensky-Martens Closed Cup)]

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**Hazards during fire-fighting:** Nitrous gases, carbon dioxide, carbon monoxide, isocyanates, vapor

**Protective equipment for fire-fighting:** Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

**Further information:** Do not allow run-off from fire-fighting to enter drains or water courses.

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Clear area. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

**Environmental Precautions:** Do not discharge into drains/surface waters/groundwater.

**Cleanup:** Dike spillage.

For small amounts: Absorb isocyanates with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Do not make container pressure tight. Move container to a well-ventilated area or outside.

Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 8 % concentrated ammonia, 2 % detergent. Add at a 10 to 1 ratio. Allow standing for at least 48 hours to allow escape of evolved carbon dioxide.

For large amounts: If temporary control of isocyanates vapor is required, a blanket of protein foam or other suitable foam (available from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal.

For residues: The following measures should be taken for final cleanup - wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes.

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## 7. HANDLING AND STORAGE

**Handling:** Put on appropriate personal protective equipment, PPE (see Section 8). Eating and drinking should be prohibited in areas where this material is handled, stored and processed. Remove contaminated PPE or clothing, wash hands and face before eating and drinking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Use only in area provided with appropriate exhaust ventilation. Empty containers retain product residue and can be hazardous. Do not get in eyes, skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment.

**Storage:** Store between 15°C to 27°C (60 to 80°F) in accordance with local regulations away from sources of heat, ignition, and direct sunlight. Store in original container. Keep in a dry, well-ventilated area, and away from incompatible materials (see section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled, unapproved or reactive containers. Use appropriate containment to avoid environmental contamination.

**Special Handling:** If bulging of drum occurs, transfer to ventilated cool area or outside away from people, puncture to relieve pressure, open vent and let stand for 48 hours before resealing.

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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Component	OSHA CLV	ACGIH TWA
Diphenylmethane-4,4'-diisocyanate (MDI)	0.02ppm; 0.2mg/m <sup>3</sup>	0.005ppm

**Advice on system design** - Provide local exhaust ventilation to maintain recommended P.E.L.

### Personal protective equipment:

**Respiratory protection** - For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions. When atmospheric levels may exceed the occupational exposure limit (PEL or TLV) NIOSH-certified air-purifying respirators equipped with an organic vapor sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place.

**Hand protection** - *Chemical resistant protective gloves, Suitable materials, chloroprene rubber (Neoprene), chlorinated polyethylene, polyvinylchloride (Pylox), butyl rubber, fluoroelastomer (Viton)*

**Eye protection** - Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

**Body protection** - Suitable materials, saran-coated material

**General safety and hygiene measures** - Wear protective clothing as necessary to prevent contact. Eye wash fountains and safety showers must be easily accessible. Observe the appropriate PEL value. Wash soiled clothing immediately. Contaminated equipment or clothing should be cleaned after each use or disposed of.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form:</b>	Liquid
<b>Odor:</b>	Faint odor, aromatic
<b>Color:</b>	Dark Amber
<b>PH Value:</b>	Not Applicable
<b>Boiling Point:</b>	200°C (5 mmHg)
<b>Vapor Pressure (25°C):</b>	0.00001 mmHg
<b>Density:</b>	10.20 lb/US gallon
<b>Viscosity (25°C):</b>	30 cps
<b>Solubility in water:</b>	Miscible, reacts with water
<b>Evaporation Rate (Butyl Acetate = 1):</b>	None
<b>Volatile Organic Compounds:</b>	None

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## 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal conditions.

Reacts with water, with formation of carbon dioxide. Risk of bursting. Reacts with alcohols. Reacts with acids. Reacts with alkalis. Reacts with amines. Risk of exothermic reaction. Risk of violent reaction. Risk of polymerization. Contact with certain rubbers and plastics can cause brittleness of the substance/product with subsequent loss in strength

**Conditions to avoid:** Moisture. Excessive heat.

**Materials to avoid:** Water, alcohols, amines, strong bases, substances/products that react with isocyanates.

**Hazardous decomposition products:** Carbon dioxide. Carbon monoxide. Hydrogen cyanide. Nitrogen oxides. Aromatic isocyanates. Gases/vapors

**Hazardous polymerization:** Under normal conditions hazardous polymerization will not occur.

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## 11. TOXICOLOGICAL INFORMATION

**Diphenylmethane-4,4'-diisocyanate (MDI) CAS 101-68-8:**

Acute Oral Toxicity LD50 - > 2,000 mg/kg (rat)

Acute Dermal Toxicity LD50 - > 10,000 mg/kg (rabbit)

Acute Inhalation Toxicity LC50 - 490 mg/m<sup>3</sup>, vapor, 4h (rat)

**Chronic Effects:** A study was conducted where groups of rats were exposed for 6 hrs/day, 5 days/week for a lifetime to atmospheres of respirable polymeric MDI aerosol at concentrations of 0, 0.2, 1 or 6 mg/m<sup>3</sup>. No adverse effects were observed at 0.2 mg/m<sup>3</sup>. At the 1 mg/m<sup>3</sup> concentration, minimal nasal and lung irritant effects were seen. Only at the top concentration (6.0 mg/m<sup>3</sup>) was there an increased incidence of a benign tumor of the lung (adenoma). One malignant pulmonary tumor (Aden carcinoma) was seen in the 6.0 mg/m<sup>3</sup> group. MDI administration to rats in this study did not change the distribution and incidence of tumors from those seen in control animals. The increased incidence of lung tumors is associated with prolonged respiratory irritation and the concurrent accumulation of yellow material in the lung. In the absence of prolonged exposure to high concentrations leading to chronic irritation and lung damage, it is highly unlikely that tumor formation will occur.

**Carcinogenicity:** The ingredients of this product are not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSHA, and not listed as carcinogens by NTP.

**Mutagenicity:** There is no substantial evidence of mutagenic potential. Reproductive Effects: No adverse reproductive effects are anticipated.

**Teratogenicity and Fetotoxicity:** No birth defects were seen in two independent animal (rat) studies. Fetotoxicity was observed at doses that were extremely toxic (including lethal) to the mother. Fetotoxicity was not observed at doses that were not maternally toxic. The doses used in these studies were maximal, respirable concentrations well in excess of the defined occupational limits.

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## 12. ECOLOGICAL INFORMATION

**Environmental Fate and Distribution:** It is unlikely that significant environmental exposure in the air or water will arise, based on consideration of the production and use of the substance.

**Toxicity: Diphenylmethane-4,4'-diisocyanate (MDI) CAS 101-68-8**

LC50 (Zebra Fish) - > 1000 mg/l, 96 hrs  
EC50 (Daphnia magna) - > 1000 mg/l, 24 hrs  
EC50 (E. Coli) - > 100 mg/l

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose in accordance with federal, state and local regulations.

The generation of waste should be avoided or minimized wherever possible. Empty containers should be taken to an approved waste-handling site for recycling or disposal. Incineration or landfill should only be considered when recycling is not feasible. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Refer to 40 CFR § 261.7 (residues of hazardous waste in empty containers).

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 14. TRANSPORT INFORMATION

Regulatory Information	UN number	Classes	Packing Group	Proper Shipping Name
DOT	3082	9	III	Other regulated substances, liquid, n.o.s. (contains 4,4' Diphenylmethane Diisocyanate (MDI))
IATA				Not Regulated
IMDG				Not Regulated
TDG				Not Regulated

## 15. REGULATORY INFORMATION

Country	Regulatory List	Notification
USA	TSCA	Included on Inventory
EU	EINECS	Included on Inventory
Canada	DSL/CEPA	Included on Inventory
China	SEPA	Included on Inventory
Japan	ENCS	Included on Inventory

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## U.S. Federal Regulations:

**OSHA:** This product is considered to be a hazardous chemical under 29 CFR 1910.1200.

**CERCLA RQ** – 5,000 lb

## CERCLA SARA Hazard Category:

**Section 311 AND 312** - This product has been reviewed according to the EPA “Hazard Categories” promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: CHRONIC HEALTH HAZARD

**Section 313** - This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CAS Number	Chemical Name
101-68-8	Diphenylmethane-4,4'-diisocyanate (MDI)

## U.S. State Regulations:

**California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)** - This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other reproductive harm.

## Right-to-Know -

CAS Number	Chemical Name	State RTK
101-68-8	Diphenylmethane-4,4'-diisocyanate (MDI)	MA, NJ, PA

**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.**

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## 16. OTHER INFORMATION

### Hazardous Material Information System (HMIS):

<i>Scale 0-4</i>		<i>NFPA</i>	<i>HMIS</i>
4=Severe Hazard	Health	2	2*
3=Serious Hazard	Flammability	1	1
2=Moderate Hazard	Reactivity	1	1
1=Slight Hazard			
0=Minimal Hazard			

THE INFORMATION AND RECOMMENDATIONS PRESENTED HEREIN ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. USER MUST CONDUCT THEIR OWN TESTS TO DETERMINE THE SUITABILITY OF THESE PRODUCTS FOR THEIR PARTICULAR PURPOSES AND USAGE. BECAUSE OF NUMEROUS FACTORS AFFECTING RESULTS, PROREZ COATINGS, LLC AND ITS AFFILIATION MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PURPOSE, OTHER THAN MATERIAL CONFORMS TO OUR APPLICABLE CURRENT SPECIFICATIONS. PROREZ COATINGS, LLC ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE ON THE INFORMATION CONTAINED IN THIS SAFETY DATA SHEET.

**END OF DATA SHEET**



# Safety Data Sheet

Date Issued: 1/25/17

Version: 1.0

## 1. CHEMICAL PRODUCTS AND COMPANY IDENTIFICATION

**Product Names/Trade Names:** ProKrete HD, RT, SL, CM, TF Aggregates, KreteFill Aggregate, FlexKrete Aggregate

**Chemical Family:** Sand, Silica Sand, Quartz, Flint, Crystalline Silica

**Manufacturer's Name:** ProREZ Coatings, LLC  
PO BOX 153  
Cromwell, CT 06416-0153 USA  
General No.: (877) 511-3456 (8:00am to 5:00pm Eastern Time)

**Company 24 Hour Emergency Response Information:** CHEMTEL: 1-800-255-3924

Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

## 2. HAZARDS IDENTIFICATION

**Emergency Overview:** Portland cement: When in contact with moisture in eyes or on skin, or when mixed with water, Portland cement becomes highly caustic ( $\text{pH} > 12$ ) and will damage or burn (as severely as third-degree) the eyes or skin. Inhalation may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system or may cause or may aggravate certain lung diseases or conditions. Use exposure controls or personal protection methods described in Section 8.

Crystalline silica (quartz) is not known to be an environmental hazard. Crystalline silica (quartz) is incompatible with hydrofluoric acid, fluorine, chlorine trifluoride or oxygen difluoride.

### Classification of the substance

CARCINOGENICITY – Category 1A

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) – Category 2

SKIN CORROSION/IRRITATION – Category 1C

SERIOUS EYE DAMAGE/EYE IRRITATION – Category 1

SKIN SENSITIZATION – Category 1

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

### Label Elements

Hazardous components that must be listed on the label:

Contains cement and silica/quartz



# Safety Data Sheet

**Signal word: DANGER**

**Pictograms:**



## **Hazard Statements:**

- H314 - Causes severe skin burns and eye damage
- H317 - May cause an allergic skin reaction
- H318 - Causes serious eye damage
- H335 - May cause respiratory irritation
- H350 - May cause cancer (Inhalation)
- H372 - Causes damage to organs through prolonged or repeated exposure.

## **Precautionary Statements**

- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P260 - Do not breathe dust.
- P264 - Wash hands, forearms, and exposed areas thoroughly after handling.
- P271 - Use only outdoors or in a well-ventilated area.
- P272 - Contaminated work clothing should not be allowed out of the workplace.
- P280 - Wear protective gloves, protective clothing, face protection, eye protection.
- P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- P303+P361+P353+P352 - IF ON SKIN (or hair): Remove/Take off immediately all hazard contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water.
- P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 - Immediately call a POISON CENTER or doctor/physician.
- P321 - Specific treatment (see Section 4).
- P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
- P362+P364 - Take off contaminated clothing and wash it before reuse.
- P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
- P405 - Store locked up.
- P501 - Dispose of contents/container according to local, regional, state, national, territorial, provincial, and international regulations.

**General Information:** This product does contain carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent damage. Repeated or prolonged contact causes sensitization, asthma and eczemas.

**Read the entire SDS for a more thorough evaluation of the hazards.**

# Safety Data Sheet

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	% By Weight	CAS Number
Crystalline Silica (quartz)	80-99%	14808-60-7
Portland Cement	<20%	65997-15-1
Calcium Hydroxide	<10%	1305-62-0

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## 4. FIRST-AID MEASURES

**General advice:** Seek medical advice.

**Eye contact:** Rinse immediately with plenty of water for at least 15 minutes.

**Skin contact:** Immediately remove any extraneous chemical, if possible without delay. Take off contaminated clothing and shoes immediately. Wash body off with soap and plenty of water.

**Ingestion:** Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position and turn victim's head to the side. Do not induce vomiting.

**Inhalation:** Move to fresh air. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

**Special Notes:** No specific first-aid is necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures. If there is a gross inhalation of crystalline silica (quartz), remove the person immediately to fresh air, give artificial respiration as needed, and seek medical attention as needed.

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## 5. FIRE-FIGHTING MEASURES

These products are not flammable, combustible or explosive.

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** No action shall be taken involving any personal risk or without suitable training. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

**Methods for Cleaning up:** Use dustless methods (vacuum) and place into closable container for disposal, or flush with water. Do not dry sweep. Wear protective equipment.

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## 7. HANDLING AND STORAGE

**Handling:** Do not breathe dust. Use adequate ventilation and dust collection. Keep airborne dust concentrations below permissible exposure limit (“PEL”). Do not rely on your sight to determine if dust is in the air. Respirable crystalline silica dust may be in the air without a visible dust cloud. If crystalline silica dust cannot be kept below permissible limits, wear a respirator approved for silica dust when using, handling, storing or disposing of this product or bag. See Section 8 for further information on respirators. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Maintain, clean, and fit test respirators in accordance with OSHA regulations. Maintain and test ventilation and dust collection equipment. Wash or vacuum clothing that has become dusty.

**Storage:** Avoid breakage of bagged material or spills of bulk material. Use dustless methods (vacuum) and place into closable container for disposal, or flush with water. Do not dry sweep.

The OSHA Hazard Communication Standard, 29 CFR 1910.1200, 1915.1200, 1917.28, 1918.90, 1926.59 and 1928.21, and state and local worker or community “right-to-know” laws and regulations needs to be strictly followed. **WARN EMPLOYEES (AND YOUR CUSTOMERS IN CASE OF RESALE) BY POSTING AND OTHER MEANS OF THE HAZARDS AND THE REQUIRED OSHA PRECAUTIONS. PROVIDE TRAINING FOR YOUR EMPLOYEES ABOUT THE OSHA PRECAUTIONS.**

For additional precautions, see American Society for Testing and Materials (ASTM) standard practice E 1132-99a, “Standard Practice for Health Requirements Relating to Occupational Exposure to Respirable Crystalline Silica.”

**Do not use ProREZ Coatings, LLC aggregates material or quartz for sandblasting.**

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Component	OSHA TWA	ACGIH TWA	NIOSH TWA
Crystalline Silica (quartz)	$\frac{10\text{mg}/\text{m}^3}{\% \text{SiO}_2 + 2}$	0.025mg/m <sup>3</sup>	0.05mg/m <sup>3</sup>
Portland Cement	15 mg total dust/m <sup>3</sup>	10 mg total dust/m <sup>3</sup>	Not Applicable

**Local Exhaust Ventilation:** Use sufficient local exhaust ventilation to reduce the level of respirable crystalline silica to below the OSHA PEL. See ACGIH “Industrial Ventilation, A Manual of Recommended Practice” (latest edition).

**Respiratory Protection:** If it is not possible to reduce airborne exposure levels to below the OSHA PEL with ventilation, use the table below to assist you in selecting respirators that will reduce personal exposures to below the OSHA PEL. This table is part of the NIOSH Respirator Selection Logic, 2004, Chapter III, Table 1, “Particulate Respirators”. Full document can be found at [www.cdc.gov/niosh/npptl/topics/respirators](http://www.cdc.gov/niosh/npptl/topics/respirators); the user of this SDS is directed to that site for information concerning respirator selection and use. The assigned protection factor (APF) is the minimum anticipated level of protection provided by each type of respirator worn in accordance with an adequate respiratory protection program. For example, an APF of 10 means that the respirator should reduce the airborne concentration of a particulate by a factor of 10, so that if the workplace concentration of a particulate was 150 ug/m<sup>3</sup>, then a respirator with an APF of 10 should reduce the concentration of particulate to 15 ug/m<sup>3</sup>.

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Assigned Protection Factor <sup>1</sup>	Type of Respirator (Use only NIOSH-certified respirators)
10	Any air-purifying elastomeric half-mask respirator equipped with appropriate type of particulate filter. <sup>2</sup> Appropriate filtering facepiece respirator. <sup>2,3</sup> Any air-purifying full facepiece respirator equipped with appropriate type of particulate filter. <sup>2</sup> Any negative pressure (demand) supplied-air respirator equipped with a half-mask.
25	Any powered air-purifying respirator equipped with a hood or helmet and a high efficiency (HEPA) filter. Any continuous flow supplied-air respirator equipped with a hood or helmet.
50	Any air-purifying full facepiece respirator equipped with N-100, R-100, or P-100 filter(s). Any powered air-purifying respirator equipped with a tight-fitting facepiece (half or full facepiece) and a high-efficiency filter. Any negative pressure (demand) supplied-air respirator equipped with a full facepiece. Any continuous flow supplied-air respirator equipped with a tight-fitting facepiece (half or full facepiece). Any negative pressure (demand) self-contained respirator equipped with a full facepiece.
1,000	Any pressure-demand supplied-air respirator equipped with a half-mask.

**Special Notes** (1, 2, and 3 references above) -

1. The protection offered by a given respirator is contingent upon (a) the respirator user adhering to complete program requirements (such as the ones required by OSHA in 29CFR1910.134), (b) the use of NIOSH-certified respirators in their approved configuration, and (c) individual fit testing to rule out those respirators that cannot achieve a good fit on individual workers.
2. Appropriate means that the filter medium will provide protection against the particulate in question.
3. An APF of 10 can only be achieved if the respirator is qualitatively or quantitatively fit tested on individual workers.

**Special Precaution:** If crystalline silica (quartz) is heated to more than 870°C, it can change to a form of crystalline silica known as trydimite; if crystalline silica (quartz) is heated to more than 1470°C, it can change to a form of crystalline silica known as cristobalite. The OSHA PEL for crystalline silica as trydimite or cristobalite is one-half of the OSHA PEL for crystalline silica (quartz).

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form:</b>	White or tan sand; granular or ground
<b>Odor:</b>	None
<b>Melting Point:</b>	3110°F/1710°C
<b>Boiling Point:</b>	4046°F /2230°C
<b>Vapor Pressure (mmHg):</b>	None
<b>Vapor Density (Air = 1):</b>	None
<b>Specific Gravity (Water = 1):</b>	2.65
<b>Solubility in water:</b>	Insoluble
<b>Evaporation Rate (Butyl Acetate = 1):</b>	None
<b>Volatile Organic Compounds</b>	None

## 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal conditions. Hazardous reactions will not occur.

**Conditions to avoid:** Very excessive heat. Water.

**Materials to avoid:** Contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires.

**Hazardous decomposition products:** Silica will dissolve in hydrofluoric acid and produce a corrosive gas – silicon tetrafluoride.

**Hazardous polymerization:** Under normal conditions hazardous polymerization will not occur.

## 11. TOXICOLOGICAL INFORMATION

The method of exposure to crystalline silica that can lead to the adverse health effects described below is inhalation.

**A. SILICOSIS:** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Silicosis can exist in several forms, chronic (or ordinary), accelerated, or acute.

Chronic or Ordinary Silicosis (often referred to as Simple Silicosis) is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. It is further defined as either simple or complicated silicosis.

Simple silicosis is characterized by lung lesions (shown as radiographic opacities) less than 1 centimeter in diameter, primarily in the upper lung zones. Often, simple silicosis is not associated with symptoms, detectable changes in lung function or disability.

Simple silicosis may be progressive and may develop into complicated silicosis or progressive massive fibrosis (PMF). Complicated silicosis or PMF is characterized by lung lesions (shown as radiographic opacities) greater than 1 centimeter in diameter. Although there may be no symptoms associated with complicated silicosis or PMF, the symptoms, if present, are shortness of breath, wheezing, cough and sputum production. Complicated silicosis or PMF may be associated with decreased lung function and may be disabling. Advanced complicated silicosis or PMF may lead to death. Advanced complicated silicosis or PMF can result in heart disease secondary to the lung disease (cor pulmonale).

Accelerated Silicosis can occur with exposure to high concentrations of respirable crystalline silica over a relatively short period; the lung lesions can appear within five (5) years of initial exposure. Progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that lung lesions appear earlier and progression is more rapid.

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**Acute Silicosis** can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis is fatal.

**B. CANCER:** IARC - The International Agency for Research on Cancer (“IARC”) concluded that there was “*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources”, and that there is “*sufficient evidence* in experimental animals for the carcinogenicity of quartz and cristobalite.” The overall IARC evaluation was that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans (Group 1)*.” The IARC evaluation noted that “carcinogenicity was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.” For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68, “Silica, Some Silicates...” (1997).

NTP - The National Toxicology Program’s Eleventh Annual Report on Carcinogens classifies “silica, crystalline (respirable size)” as a known human carcinogen.

OSHA - Crystalline silica (quartz) is not regulated by the U. S. Occupational Safety and Health Administration as a carcinogen.

**C. AUTOIMMUNE DISEASES:** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers. For a review of the subject, the following may be consulted: “Occupational Exposure to Crystalline Silica and Autoimmune Disease”, Environmental Health Perspectives, Volume 107, Supplement 5, pp. 793-802 (1999); “Occupational Scleroderma”, Current Opinion in Rheumatology, Volume 11, pp. 490-494 (1999).

**D. TUBERCULOSIS:** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis. The following may be consulted for further information: Occupational Lung Disorders, Third Edition, Chapter 12, entitled “Silicosis and Related Diseases”, Parkes, W. Raymond (1994); “Risk of pulmonary tuberculosis relative to silicosis and exposure to silica dust in South African gold miners,” Occup Environ Med., Volume 55, pp.496-502 (1998).

**E. KIDNEY DISEASE:** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers. For additional information on the subject, the following may be consulted: “Kidney Disease and Silicosis”, Nephron, Volume 85, pp. 14-19 (2000).

**F. NON-MALIGNANT RESPIRATORY DISEASES:** The reader is referred to Section 3.5 of the NIOSH Special Hazard Review cited below, for information concerning the association between exposure to crystalline silica and chronic bronchitis, emphysema and small airways disease. There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases, particularly among smokers. It is unclear whether the observed associations exist only with underlying silicosis, only among smokers, or result from exposure to mineral dusts generally (independent of the presence or absence of crystalline silica, or the level of crystalline silica in the dust).

**Sources of information:** The *NIOSH Hazard Review - Occupational Effects of Occupational Exposure to Respirable Crystalline Silica* published in April 2002 summarizes and discusses the medical and epidemiological literature on the health risks and diseases associated with occupation exposures to respirable crystalline silica. The *NIOSH Hazard Review* should be consulted for additional information, and citations to published studies on health risks and diseases associated with occupational exposure to respirable crystalline silica. The *NIOSH Hazard Review* is available from NIOSH - Publications Dissemination, 4676 Columbia Parkway, Cincinnati, OH 45226, or by calling 1-800-35-NIOSH (1-800-356-4676), or through the NIOSH web site, [www.cdc.gov/niosh/topics/silica](http://www.cdc.gov/niosh/topics/silica), then click on the link “NIOSH Hazard Review: Health Effects of Occupational Exposure to Respirable Crystalline Silica”.

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## 12. ECOLOGICAL INFORMATION

Crystalline silica (quartz) is not known to be ecotoxic; i.e., there are no data that suggests that crystalline silica (quartz) is toxic to birds, fish, invertebrates, microorganisms or plant



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## 13. DISPOSAL CONSIDERATIONS

**General:** The packaging and material may be landfilled; however, material should be covered to minimize generation of airborne dust.

The above applies to materials as sold by ProREZ Coatings, LLC. The material may be contaminated during use, and it is the responsibility of the user to assess the appropriate disposal of the used material in accordance with federal, state and local regulations.

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## 14. TRANSPORT INFORMATION

Crystalline silica (quartz) and Portland cement are not a hazardous material for purposes of transportation under the U. S. Department of Transportation Table of Hazardous Materials, 49 CFR §172.101.

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## 15. REGULATORY INFORMATION

### UNITED STATES (FEDERAL AND STATE)

TSCA No.: Crystalline silica (quartz) appears on the EPA TSCA under the CAS No. 14808-60-7.

CERCLA: Crystalline silica (quartz) is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.

Emergency Planning and Community Right to Know Act (SARA Title III): Crystalline silica (quartz) is not an extremely hazardous substance under Section 302 and is not a toxic chemical subject to the requirements of Section 313.

Clean Air Act: Crystalline silica (quartz) mined and processed by U.S. Silica Company is not processed with or does not contain any Class I or Class II ozone depleting substances.

FDA: Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR §175.300(b)(3)(xxvi).

NTP: Respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, is classified as Known to be a Human Carcinogen.

OSHA Carcinogen: Crystalline silica (quartz) is not listed.

California Proposition 65: Crystalline silica (airborne particles of respirable size) is classified as a substance known to the State of California to be a carcinogen.

California Inhalation Reference Exposure Level (REL): California established a chronic REL of 3 ug for silica (crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no adverse health effects are anticipated in individuals indefinitely exposed to the substance at that level.

Massachusetts Toxic Use Reduction Act: Silica, crystalline (respirable size, <10 microns) is “toxic” for purposes of the Massachusetts Toxic Use Reduction Act.

Pennsylvania Worker and Community Right to Know Act: Quartz is a hazardous substance under the Act, but it is not a special hazardous substance or an environmental hazardous substance.

### CANADA

Domestic Substances List: ProREZ aggregates products, as naturally occurring substances, are on the Canadian DSL.

WHMIS Classification: D2A

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## OTHER

EINECS No.: 238-878-4

EEC Label (Risk/Safety Phrases): R 48/20, R 40/20, S22, S38

IARC: Crystalline silica (quartz) is classified in IARC Group 1.

Japan MITI: Crystalline silica (quartz) is an existing chemical substances as defined in the Chemical Substance Control Law.

Australian Inventory of Chemical Substances: All of the components of this product are listed on the AICS inventory or exempt from notification requirements.

**National, state, provincial or local emergency planning, community right-to-know or other laws, regulations or ordinances may be applicable--consult applicable national, state, provincial or local laws.**

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## 16. OTHER INFORMATION

### Hazardous Material Information System (HMIS):

<i>Scale 0-4</i>		<i>NFPA</i>	<i>HMIS</i>
4=Severe Hazard	Health	0	*, **
3=Serious Hazard	Flammability	0	0
2=Moderate Hazard	Reactivity	0	0
1=Slight Hazard			
0=Minimal Hazard			

\* = chronic health hazard

\*\* For further information on health effects, see Sections 3 and 11 of this SDS.

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