

Concrete Resurfacer
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Version 1.3

**TCC Materials** 

2025 Centre Pointe Boulevard

Mendota Heights, MN 55120-1221

**Emergency Telephone Number:** 

651-688-9116

**Information Telephone Number** 

**Revision Date** 

July 2023

651-688-9116

#### **Section 1: Product Identification**

Product Type: Concrete-Based Products (Patches, Grouts, Mortars)

#### **Product Name:**

Concrete Resurfacer

#### Section 2: Hazard Identification

The most immediate and likely hazards are burns from dust in the eye. When the product is mixed with water, it will form an alkaline solution, which can cause skin irritation. Dust from the product is irritating to breathe. Prolonged overexposure to dust from the product is harmful to breathe, because it will contain crystalline silica.

# GHS Label Elements Hazard Pictogram(s):







Signal Word: DANGER

This product has been evaluated according to GHS and 29CFR1910.1200, Appendix A. It is categorized as a Health Hazard Carcinogen Category 1A, because it contains crystalline silica (quartz). It is categorized as a Health Hazard (serious eye damage/eye irritation - Category 1 and skin irritation - Category 2) because it contains Portland cement.

# Applicable hazard statement(s) based on cement content

Causes severe skin burns and eye damage.

May cause an allergic reaction.

May cause respiratory irritation.

#### Applicable hazard statement(s) based on crystalline silica content

May cause cancer from inhaling dust.

Causes damage to respiratory system (silicosis) through prolonged or repeated exposure to inhaled dust.



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# Precautionary Statement(s) Prevention

Do not breathe dust. Wash thoroughly after handling. Wear protective gloves/clothing and eye/face protection (water resistant protective gloves; goggles recommended to prevent any dust in eyes). Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product.

#### Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor if any eye irritation or discomfort develops.

IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with plenty of water. Wash contaminated clothing before reuse. If skin irritation occurs, get medical attention.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center/doctor.

If exposed or concerns, or if you feel unwell: Get medical advice.

## **Storage**

Store locked up, in a dry location, in original labeled packaging.

## Disposal

Dispose of contents/container in accordance with local/state/national regulations.

#### **Other Hazards**

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions or illness.

Section 3: Hazardous Ingredients/Composition		
Ingredient	Typical Percentage	CAS#
Sand, which includes		
Silica sand (as quartz)	40-70%	14808-60-7
Cement, alumina, chemicals		65997-16-2
Portland cement	1-5%	65997-15-1
Calcium hydroxide	1-5%	1305-62-0
Lithium carbonate		554-13-2

The exact percentage (concentration) of chemicals has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

<sup>\*</sup> Per NOM-018-STPS-2000



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#### Section 4: First Aid Measures

# **Description of the First Aid Measure Eve contact:**

Immediately rinse eyes: hold eyelids apart and flush eyes with plenty of water. At least fifteen minutes of flushing is recommended. Get prompt medical attention for any discomfort or irritation.

#### **Skin Contact:**

Promptly wash off with plenty of soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention for any burns or persistent rashes.

#### Inhalation:

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.. Get medical attention if you feel unwell.

#### Ingestion:

If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.

### The Most Important Symptoms and Effects, both Acute and Delayed:

Eye contact: Causes serious eye damage. Eye irritation from the mechanical effect. Eye irritation, burning from cement. Cement reacts with moisture to form a very alkaline solution, which can severely irritate or burn eyes. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Skin Contact: Can cause skin irritation and can dry the skin. Because cement reacts with moisture exothermically to form an alkaline solution, contact with damp skin can cause irritation or burns, which may not be felt immediately. Severe burns of the feet have resulted from cement getting into footwear. Some people may develop an allergic dermatitis (cement itch) from chromate contaminants in Portland cement. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. May cause sensitization by skin contact.

<u>Inhalation:</u> Breathing the dust may cause coughing, wheezing, sore throat. Repeated exposure to the dust can cause a runny nose, chronic coughing and impaired lung function. Long term exposure to respirable crystalline silica in the dust can cause silicosis (lung scarring) and lung cancer.

<u>Ingestion:</u> Harmful if swallowed. May cause stomach distress, nausea or vomiting.

# Indication of any Immediate Medical Attention and Special Treatment Needed:

**Note to physician**: Treat according to symptoms; symptoms may not appear immediately. No known specific antidote.

**Specific Treatments:** In case of accident or if you feel unwell, seek medical advice immediately (show label or SDS where possible).



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## **Section 5: Fire Fighting Measures**

#### Flammability:

Not flammable by WHMIS/OSHA criteria.

#### Fire extinguishing media:

Appropriate for surrounding materials.

# Special fire-fighting procedures:

None.

#### Unusual fire and explosion hazards:

None.

## **Hazardous combustion products:**

May include, and are not limited to: oxides of carbon.

### Special protective equipment and precautions for fire-fighters:

Keep upwind of fire. Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

#### Section 6: Accidental Release Measures

#### Personal Precautions, Protective Equipment, and Emergency Procedures:

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

#### **Methods for Containment:**

Contain spill, then place in a suitable container. Avoid creating dust. Do not wash down drains or allow product to enter sewers – product will harden upon contact with water. Use appropriate Personal Protective Equipment (PPE).

#### **Methods for Cleaning-Up:**

Vacuum or sweep material and place in a disposal container.

### **Section 7: Handling and Storage**

## **Precautions for safe handling:**

### Handling:

Avoid contact with skin and eyes. Do not swallow. Good housekeeping is important to prevent accumulation of dust. Avoid generating and breathing dust. The use of compressed air for cleaning clothing, equipment, etc. is not recommended. Handle and open container with care. When using do not eat or drink. Wash hands before eating, drinking, or smoking. (See section 8)

#### **General Hygiene Advice:**

Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking. Do not eat, drink, or use tobacco products when handling any chemical products.



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# Conditions for safe storage, including any incompatibilities:

## Storage:

Keep out of the reach of children. Store in dust-tight, dry, labeled containers. Keep containers closed when not in use. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Do not store in an area equipped with emergency water sprinklers. (See section 10

#### **Section 8: Exposure Controls/Personal Protection**

**Occupational Exposure Limits:** 

	OSHA PEL	ACGIH TLV	NIOSH REL
Crystalline Silica (quartz)	50 μg/m³ (8-hr TWA)	25 μg/m³ (respirable)	50 μg/m³ (respirable)
Cement, alumina, chemicals	50 mppcf	1 mg/m³ (respirable)	10 mg/m³ (total) 5 mg/m³ (respirable)
Portland cement	50 mppcf	1 mg/m³ (respirable)	10 mg/m³ (total) 5 mg/m³ (respirable)
Calcium hydroxide	15 mg/m³ (total); 5 mg/m³ (resp)	5 mg/m³	Not available.
Lithium carbonate	Not available.	Not available.	Not available.

# **Engineering Controls:**

Avoid creating dust.

If cutting or grinding material after it has hardened, water can be used as a dust suppressant.

## Personal protective equipment

#### **Eye/face protection:**

Wear approved eye (properly fitted dust- or splash-proof chemical safety goggles) / face (face shield) protection. If used in dusty or windy conditions, goggles are recommended.

#### **Skin protection:**

Avoid any skin contact, particularly when skin may be wet from sweat. Wear any water-impermeable gloves such as PVC gloves, particularly for prolonged contact. Wear waterproof boots, high enough to prevent any cement from getting into them. Promptly wash off of skin and remove contaminated clothing.

#### Respiratory protection:

Usually not required when working with virgin product, but take measures to minimize dust exposure. May be required, depending on work done, for grinding or cutting material after it has hardened.



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For protection against irritation from dust or up to ten times the recommended exposure limits, use a NIOSH-approved N-95 filtering facepiece or a half mask respirator equipped with N-95 filters. A more protective respirator (e.g., P100 filters or full face respirator) may be substituted.

### **General Health and Safety Measures:**

Handle according to established industrial hygiene and safety practices. Do not eat, smoke, or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking.

# **Section 9: Physical and Chemical Properties**

Gray or gray-brown powder. Appearance:

No significant odor. Odor:

Not available. Odor Threshold:

**Physical State:** Solid. 10-12 :Ha

**Melting Point/Freezing Point:** Not available. Initial Boiling Point and Boiling Range: Not available. Flash point: Not available. **Evaporation Rate:** Not available. Not flammable. Flammability: **Lower Flammability/Explosive Limit:** Not available. **Upper Flammability/Explosive Limit:** Not available. **Vapor Pressure:** Not available. **Vapor Density:** Not available. **Relative Density/Specific Gravity:** Not available. Not available. Solubility: Partition coefficient n-octanol/water: Not available. **Auto-ignition Temperature:** Not available. **Decomposition Temperature:** Not available. Not available.

VOC content, wt. %: 0%, Not applicable, 0 wt. Not applicable.

Not available.

### Section 10: Stability and Reactivity

#### Reactivity:

**Viscosity:** 

No dangerous reaction known under conditions of normal use.

#### **Chemical Stability:**

Percent Volatile, wt. %:

Stable under normal storage conditions. Keep dry in storage.

# **Possibility of Hazardous Reactions:**

No dangerous reaction known under conditions of normal use.



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#### Conditions to avoid:

Incompatible materials. Moisture.

# Incompatibility:

Will react with water, hydrating product, hardening it, and giving off heat. Avoid strong oxidizers, strong acids.

### **Hazardous decomposition products:**

May include, and are not limited to: oxides of carbon.

Silica will dissolve in hydrofluoric acid and produce a corrosive gas - silicon tetrafluoride.

## **Section 11: Toxicological Information**

# Information on Toxicological Effects Likely Routes of Exposure:

Skin contact, skin absorption, eye contact, inhalation, and ingestion.

# Symptoms related to physical/chemical/toxicological characteristics:

**Eye:** Causes serious eye damage. May cause burns in the presence of moisture. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

**Skin:** Causes skin irritation. May cause burns in the presence of moisture. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. May cause sensitization by skin contact.

#### Ingestion:

Harmful if swallowed. May cause stomach distress, nausea or vomiting.

#### Inhalation:

May cause respiratory tract irritation.

#### **Acute Toxicity:**

Ingredient	IDLH	LC50	LD50
Crystalline Silica (quartz)	Ca [25 mg/m <sup>3</sup> (cristobalite, tridymite) 50 mg/m <sup>3</sup> (quartz, tripoli)]	Not available.	Oral 500 mg/kg, rat
Cement, alumina, chemicals	5000 mg/m <sup>3</sup>	Not available.	Not available.
Portland cement	5000 mg/m <sup>3</sup>	Not available.	Not available.
Calcium hydroxide	Not available.	Not available.	Oral 7340 mg/kg, rat
Lithium carbonate	Not available.	Inhalation >2.17 mg/L, rat	Oral 525 mg/kg, rat



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Calculated overall Chemical Acute Toxicity Values		
LC50 (inhalation)	LD50 (oral)	LD50 (dermal)
Not available.	527 mg/kg, rat	Not available.

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, CP65)*
Crystalline Silica (quartz)	G-A2, I-1, N-1, CP65
Cement, alumina, chemicals	Not listed.
Portland cement	G-A4
Calcium hydroxide	Not listed.
Lithium carbonate	CP65

Delayed, Immediate, and Chronic Effects of Short- and Long-Term Exposure:

**Skin Corrosion/Irritation:** Causes skin irritation. May cause burns in the

presence of moisture.

Serious Eye Damage/Irritation: Causes serious eye damage. May cause burns in the

presence of moisture.

**Respiratory Sensitization:** Based on available data, the classification criteria are

not met.

**Skin Sensitization:** May cause an allergic skin reaction.

**STOT-Single Exposure:** Based on available data, the classification criteria are

not met.

**Chronic Health Effects:** Respirable crystalline silica in the form of quartz or

cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. Prolonged exposure to respirable

crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given

exposure to respirable silica dust, the risk of

contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the

length of time (usually years) of exposure.

**Carcinogenicity:** May cause cancer.

**Germ Cell Mutagenicity:** This product is not classified as a mutagen.

**Reproductive Toxicity:** 

**Developmental:** May damage the unborn child.

**Teratogenicity:** Not hazardous by WHMIS/OSHA criteria.



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**Embryotoxicity:** Not hazardous by WHMIS/OSHA criteria.

**Fertility:** May damage fertility.

**STOT-Repeated Exposure:** Causes damage to organs through prolonged or

repeated exposure.

**Aspiration Hazard:** Based on available data, the classification criteria are

not met.

**Toxicologically Synergistic** 

Materials: Not available.

Other Information: Not available.

### Section 12: Ecological Information

# **Ecotoxicity**:

#### **Acute/Chronic Toxicity:**

No ecological consideration when used according to directions. Normal dilution of this product to drains, sewers, septic systems and treatment plants is not considered environmentally harmful.

Persistence and degradability: Not available.

**Mobility in soil:** no information available.

**Bioaccumulation:** based on ingredients, not likely to bioaccumulate

# **Section 13: Disposal Considerations**

#### **Waste Treatment Methods:**

Do not sewer or dump on the ground

As provided, not a RCRA-regulated waste.

Dispose of in accordance with federal, state, and local regulations.

### **Section 14: Transportation**

Not a DOT-regulated hazardous material. Not classified as dangerous goods for DOT, IATA, IMDG, TDG

Do not handle until all safety precautions have been read and understood.

#### **Section 15: Regulatory Information**

# SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/ LEGISLATIONS SPECIFIC FOR THE CHEMICAL



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Canadian: 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.

**US:** MSDS prepared pursuant to the Hazard Communication Standard (CFR29

1910.1200) HazCom 2012

SARA Title III				
Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Crystalline Silica (quartz)	Not listed.	Not listed.	Not listed.	Not listed.
Cement, alumina, chemicals	Not listed.	Not listed.	Not listed.	Not listed.
Portland cement	Not listed.	Not listed.	Not listed.	Not listed.
Calcium hydroxide	Not listed.	Not listed.	Not listed.	Not listed.
Lithium carbonate	Not listed.	Not listed.	Not listed.	313

# State Regulations California Proposition 65:

The state of California requires the following statement (Proposition 65) in regards to this material:



**WARNING:** This product can expose you to chemicals including crystalline silica which are known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information go to <a href="https://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>.

#### **Global Inventories**

Ingredient	Canada DSL/NDSL	USA TSCA
Crystalline Silica (quartz)	DSL	Yes.
Cement, alumina, chemicals	DSL	Yes.
Portland cement	DSL	Yes.
Calcium hydroxide	DSL	Yes.
Lithium carbonate	DSL	Yes.

#### **NFPA National Fire Protection Association:**

Health: 3 Fire: 1 Reactivity: 0

# **HMIS – Hazardous Materials Identification System:**

Health: 3\* Fire: 1 Physical Hazard: 0



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

#### WHMIS Classification(s):

Class D2A – Carcinogenicity
Class D2A - Chronic Toxic Effects
Class E - Corrosive Material

#### **WHMIS Hazard Symbols:**





## **Source Agency Carcinogen Classifications:**

CP65 CaliforniaProposition65

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) American Conference of Governmental Industrial Hygienists.

A1 - Confirmed human carcinogen.

A2 - Suspected human carcinogen.

A3 - Animal carcinogen.

A4 - Not classifiable as a human carcinogen.

A5 - Not suspected as a human carcinogen.

# IARC (I) International Agency for Research on Cancer.

1 - The agent (mixture) is carcinogenic to humans.

2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.

- 3 The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
- 4 The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

### NTP (N) National Toxicology Program.

- 1 Known to be carcinogens.
- 2 Reasonably anticipated to be carcinogens.

#### **Section 16: Other Information**

Additional information on the product is available at: www.tccmaterials.com

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