

BLUESTONE PRODUCTS™
A TCC Materials Company
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Mendota Heights, MN 55120-1221

Emergency Telephone Number:
651-688-9116
Information Telephone Number
651-905-8137

Revision Date
June 2021

Section 1: Product Identification

Product Type: Dry Packaged Cement-Based Products

Product Name:
Construction Grout

Section 2: Hazard Identification

Classification of the chemical:

Hazard Class: Acute toxicity 4 (Oral)
Skin irritation 2
Serious eye damage 1
Skin sensitization 1
Carcinogenicity 1A
Specific target organ toxicity - Single exposure 3
Specific target organ toxicity - Repeated exposure 1

Label elements**Hazard pictogram:****Signal word:**

Danger

Hazard statement:

Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements**Prevention:**

Do not eat, drink or smoke when using this product. Wash skin thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust.

Response:

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

IF exposed or concerned: Get medical advice/attention. Immediately call a POISON CENTER / doctor.

Storage:

Store locked up. Keep container labeled and tightly closed.

Disposal:

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards not contributing to the classification: Not applicable.

Refer to Section 11 for more detailed information on health effects and symptoms.

Section 3: Hazardous Ingredients/Composition

Ingredient	Typical Percentage	CAS #
Silica Sand (as quartz)	60-75%	14808-60-7
Portland cement	20-40%	65997-15-1
Calcium aluminate cement	0.1-5%	65997-16-2

*Specific chemical identities and concentrations withheld as trade secret. They are available upon request to health professionals, employees and their designated representatives in accord with 29CFR1910.1200(i).

Section 4: First Aid Measures

First-aid measures after eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Call a physician if irritation develops and persists.

First-aid measures after skin contact: In case of contact, wash skin with plenty of cool water and pH-neutral soap or detergent. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

First-aid measures after inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell. Consult a physician after significant exposure.

First-aid measures after 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.

Most important symptoms and effects, both acute and delayed:

Symptoms/injuries after inhalation: May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated inhalation. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

Symptoms/injuries after skin contact: 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.

Symptoms/injuries after eye contact: 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.

Symptoms/injuries after ingestion: Harmful if swallowed. May cause stomach distress, nausea or vomiting.

Indication of Any Immediate Medical Attention and Special Treatments Needed: Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Section 5: Fire Fighting Measures

Flammability: Not flammable by WHMIS/OSHA criteria.

Extinguishing Media

Fire extinguishing media: Appropriate for surrounding materials

Unsuitable extinguishing media: Not available.

Special hazards arising from the substance or mixture

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

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

Advice for fire fighters

Firefighting equipment and instructions: 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:

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

Methods and Materials for Containment and Clean-Up:

Methods for Containment: Contain spill, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE). Do not wash down drains or allow product to enter sewers – product will harden upon contact with water.

Methods for Cleaning-Up: Vacuum or sweep material and place in a disposal container.

Section 7: Handling and Storage

Precautions for Safe Handling:
Precautions for safe 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 measures: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

Conditions for Safe Storage, Including Any Incompatibilities:
Storage conditions:

Keep out of the reach of children. Store in dust-tight, dry, labelled 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)

Specific end use(s): No additional information available.

Section 8: Exposure Controls/Personal Protection

Occupational Exposure Limits:

	OSHA PEL	OSHA 1989 PEL*	ACGIH TLV	NIOSH REL

Silica Sand (as quartz)	<u>10 mg/m³</u> (%silica+2)	0.1 mg/m ³ (respirable)	0.025 mg/m ³ (respirable)	0.05 mg/m ³
Portland cement	50 mppcf	10 mg/m ³ (total) 5 mg/m ³ (respirable)	1 mg/m ³ (respirable)	10 mg/m ³ (total) 5 mg/m ³ (respirable)
Calcium aluminate cement	Use exposure limits for Portland cement.			

*For states that adopted the 1989 PEL revisions (Minnesota, Oregon, Washington, California)

Exposure Controls

Appropriate engineering controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. If cutting or grinding material after it has hardened, water can be used as a dust suppressant.

Individual Protective Measures

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: A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

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

Information on basic physical and chemical properties

Physical State:	Solid.
Appearance:	Powder.
Color:	Gray to gray-brown.
Odor:	Characteristic.
Odor Threshold:	No data available.
pH:	10 – 12
Relative evaporation rate (butylacetate=1):	Product does not evaporate.
Melting point:	>2700°F.
Freezing Point:	No data available.
Boiling Point:	>2700°F.
Flash point:	Noncombustible.
Self-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Flammability (solid, gas):	Not Flammable.
Vapor pressure:	No data available.
Relative vapor density at 20°C:	No data available.
Relative density:	No data available.
Solubility:	No data available.
Low Pow:	No data available.
Low Kow:	No data available.
Viscosity, kinematic:	No data available.
Viscosity, dynamic:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.
Explosive limits:	No data available.
VOC content:	0%, Not applicable.

Section 10: Stability and Reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical Stability: Stable under normal storage conditions. Keep dry in storage.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Incompatible materials. Moisture.

Incompatible Materials: Wet cement is alkaline and incompatible with acid, ammonium salts and aluminum metal.

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

Section 11: Toxicological Information

Information of 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: Harmful if swallowed.

Ingredient	IDLH	LC50	LD50
Sand, Silica, crystalline, quartz	Ca [25 mg/m ³ (cristobalite, tridymite) 50 mg/m ³ (quartz, tripoli)]	Not available.	Oral 500 mg/kg, rat
Portland cement	5000 mg/m ³	Not available.	Not available.
Cement, alumina, chemicals	Not available.	Not available.	Not available.

Calculated overall Chemical Acute Toxicity Values		
LC50 (inhalation)	LD50 (oral)	LD50 (dermal)
Not available.	501.9 mg/kg, rat	Not available.

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

Delated, Immediate, and Chronic Effects of Short-Term 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:	May cause respiratory irritation.
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:	Based on available data, the classification criteria are not met.
Teratogenicity:	Not hazardous by WHMIS/OSHA criteria.
Embryotoxicity:	Not hazardous by WHMIS/OSHA criteria.
Fertility:	Based on available data, the classification criteria are not met.
STOT-Repeated Exposure:	Based on available data, the classification criteria are not met.
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 likely to biodegrade

Mobility in soil: no information available.

Bioaccumulation: based on ingredients, not likely to bioaccumulate

Section 13: Disposal Considerations

Disposal Methods:

This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Other disposal recommendations:

Not available.

Section 14: Transportation

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

Environmental hazards:

Not applicable.

Transport in Bulk According to Annex II of Marpol 73/78 and the IBC Code:

Not available.

Special transport precautions:

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

Section 15: Regulatory Information

This product does not contain any

- chemicals regulated under:
 - CERCLA
 - SARA 302 EHS
 - SARA 311/312
 - SARA 313
- Hazardous Air Pollutants

US State Regulations

It is on the New Jersey Right to Know Hazardous Substance List.

California Proposition 65


WARNING: This product can expose you to chemicals, including Silica crystalline (quartz), which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Chemical Name	California Proposition 65
Sand, Silica, crystalline, quartz	Carcinogen

Global Inventories:

Ingredient	Canada DSL/NDSL	USA TSCA
Sand, Silica, crystalline, quartz	DSL	Yes.
Portland cement	DSL	Yes.
Cement, alumina, chemicals	DSL	Yes.

NFPA - National Fire Protection Association:

Health	3
Fire:	1
Reactivity:	0

HMIS – Hazardous Materials Identification System:

Health	3*
Fire:	1
Reactivity:	0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme
 HMIS® is a registered trademark of the National Paint and Coatings Association

WHMIS Classification(s):

Class D2A – Carcinogenicity
 Class D2B – Skin/Eye Irritant
 Class E - Corrosive Material

WHMIS Hazard Symbols:**Mexico Classification:**

Blue = Health Red = Flammability Yellow = Reactivity White = Special

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

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

CP65 California Proposition 65

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

Date of Preparation: June 13, 2017
Version: 1.1
Date of Revision: December 1, 2020

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