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

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

Revision Date
December 2020

Section 1: Product Identification

Product Type: Dry Packaged Cement-Based Products

Product Name:
Rapid Patch® Multi-Purpose Repair

Section 2: Hazard Identification

Classification of the Chemical:
Hazard Class:
This product has been evaluated according to GHS and 29CFR1910.1200, Appendix A.

Skin corrosion/irritation 2
Serious eye damage/eye irritation 1
Carcinogenicity 1A
Specific target organ toxicity - Single exposure 3 (respiratory tract irritation)
Specific target organ toxicity - Repeated exposure 2 (lungs)

Label Elements
Hazard Pictogram:

Signal Word: DANGER.

Hazard Statement: Harmful if swallowed. 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.

Prevention: Do not eat, drink or smoke when using this product. Wash hands 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 swallowed: Immediately call a poison center/doctor. Rinse mouth. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If exposed or concerned: Get medical advice/attention

Storage: Keep container tightly closed. Store in dry location.
Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Additional Information
Hazards not otherwise classified: Not applicable.

HMIS® Rating: Health: 3* Fire: 0 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

Section 3: Hazardous Ingredients/Composition

Ingredient	Typical Percentage	CAS #
Portland Cement	5-25%	65997-15-1
Calcium Sulfoaluminate Cement	40-60%	960375-09-1
Sand, which includes		
silica sand (as quartz)	30-60%	14808-60-7
Aggregate (rock)	30-60%	N.A.

*Specific chemical compositions 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

Description of the First Aid Measure
Eye contact:
Immediately rinse eyes: hold eyelids apart and flush eyes with plenty of water. At least fifteen minutes of flushing is recommended. If easy to do, remove contact lenses, if worn. Get medical attention immediately.
Skin Contact:
In case of contact, immediately 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 irritation develops, or breathing is difficult, get to fresh air and keep at rest in a comfortable position for breathing. Get medical advice/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.

Symptoms of Overexposure, 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: Causes 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.

Inhalation: 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.

Ingestion: Harmful if swallowed. May cause stomach distress, nausea or vomiting. Immeditately rinse mouth and drink plenty of water. Get medical attention immediately.

Indication of any Immediate Medical Attention and Special Treatments Needed

Note to Physician: Symptoms may not appear immediately Treat according to symptoms. No known specific antidote.

Specific Treatments: 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.

Fire Extinguishing Media: Appropriate for surrounding materials, water fog, foam, dry chemical powder, carbon dioxide (CO2). Product is not flammable.

Special Hazards Arising from the Chemical:

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: No unusual fire or explosion hazards noted.

Special Fire-Fighting Equipment and Precautions: Keep upwind of fire. Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Do not use water jet as an extinguisher, as this will spread the fire.

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 and Materials for Containment and Clean-Up:

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).

Clean-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.

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
Portland cement	15 mg/m^3 (T) 5 mg/m^3 (R)	1 mg/m^3 (R)	10 mg/m^3 (T) 5 mg/m^3 (R)
Calcium Sulfoaluminate Cement	15 mg/m^3 (T) 5 mg/m^3 (R)	1 mg/m^3 (R)	10 mg/m^3 (T) 5 mg/m^3 (R)
Crystalline silica (quartz)	50 µg/m^3 (8-hr TWA)	25 µg/m^3 (respirable)	50 µg/m^3 (respirable)

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:

Safety glasses with side shields unless full face respirator is in use. 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.

For protection against irritation from dust or up to ten times the recommended exposure limits, use a NIOSH-approved N-95 filtering face piece 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

Appearance: Powder.
Color: Grey or grey-tan powder.
Odor: No significant odor.
Flash point: Noncombustible.
Flammable limits: N/A
Boiling Point: >2700°F
Melting point: >2700°F
Specific Gravity: Not available.
Solubility in water: slight
pH: 11-13 (cements in water)
Evaporation Rate: Not applicable. Product does not evaporate.
Evaporation rate (butyl acetate = 1): not applicable
VOC content, wt. %: 0%, Not applicable; 0 wt., 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.
I**ncompatible Materials**: Will react with water, hydrating product, hardening it, and giving off heat. Wet cement is alkaline and incompatible with acid, ammonium salts and aluminum metal.
Hazardous Polymerization: Will not occur.
Hazardous Decomposition Products: Silica will dissolve in hydrofluoric acid and produce a corrosive gas - silicon tetrafluoride. 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: Inhalation of dust may cause respiratory tract irritation. May cause damage to organs through prolonged or repeated exposure by inhalation.

Acute Toxicity:

Ingredient	IDLH	LC50	LD50
Portland cement	5000 mg/m^3	Not available.	Not available
Calcium Sulfoaluminate Cement	Not available.	Not available.	Not available.
Crystalline silica (quartz)	Ca [25 mg/m^3 (cristobalite, tridymite); 50 mg/m^3 (quartz, Tripoli)]	Not available.	Oral 500 mg/kg, rat

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

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

Skin Corrosion/Irritation: Portland cement is caustic and abrasive to the skin. In contact with water or moisture, it can form alkaline hydroxides, which can cause burns that may not be felt immediately.
Portland cement may contain trace amounts of hexavalent chromium. Hexavalent chromium can cause allergic contact dermatitis.

Serious Eye Damage/Irritation: Portland cements are categorized as Health Hazard Serious Eye Damage/Eye Irritation Category 1 and Serious Skin Category 2, because they form a strong alkaline solution in water.

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 fibrosis (scarring) of the lungs, which may be disabling. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders. 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: Crystalline silica is listed as carcinogenic according to IARC. ACGIH classified crystalline silica as a suspected human carcinogen.

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: 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

Product as a whole has not been tested but is expected to have low acute toxicity.

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

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 / Legislation Specific for the Chemical
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
Mexico: MSDS prepared pursuant to NOM-018-STPS-2000.

SARA Title III				
Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 ESH RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Portland cement	Not listed.	Not listed.	Not listed.	Not listed.
Calcium Sulfoaluminate Cement	Not listed.	Not listed.	Not listed.	Not listed.
Crystalline silica (quartz)	Not listed.	Not listed.	Not listed.	Not listed.

State Regulations:

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

WARNING: Cancer - www.P65Warnings.ca.gov

US. Massachusetts RTK - Substance List
Silica, quartz (CAS 14808-60-7)
US. New Jersey Worker and Community Right-to-Know Act
Silica, quartz (CAS 14808-60-7)
US. Pennsylvania Worker and Community Right-to-Know Law
Silica, quartz (CAS 14808-60-7)
US. Rhode Island RTK
Not regulated
US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
Silica, quartz (CAS 14808-60-7)

Global Inventories

Ingredient	Canada DSL/NDSL	USA TSCA
Portland cement	DSL	Yes.
Calcium Sulfoaluminate Cement	DSL	Yes.
Crystalline silica (quartz)	DSL	Yes.

Section 16: Other Information

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

Date of Preparation: June 4, 2018
Version: 1.2
Date of Revision: December 8, 2020

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