



TCC Materials
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Emergency Telephone Number:
651-688-9116
Information Telephone Number:
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Revision Date
November 2018

Section 1: Product Identification

Product Type: Dry Packaged Cement-Based Products

Product Name:

Tech-Mix® Commercial Tile Mortar (Gray and White)

Section 2: Hazard Identification

Classification of the Chemical:

Hazard Class:

This product has been evaluated according to GHS and 29CFR1910.1200, Appendix A.

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

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. May cause respiratory irritation.

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. Use only outdoors or in a well-ventilated area. 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. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

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

Additional Information

Hazards not otherwise classified: Not applicable.

Section 3: Hazardous Ingredients/Composition

Ingredient	Typical Percentage	CAS #
Sand, which includes		
silica sand (as quartz)	40-70%	14808-60-7
Portland Cement	15-40%	65997-15-1
Calcium carbonate	5-10%	1317-65-3
Ferric oxide	3-7%	1309-37-1
Gypsum.....	1-5%	13397-24-5
Magnesium oxide	1-5%	1309-48-4
Calcium oxide.....	1-5%	1305-78-8

*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.

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. 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: Not available.

Special Fire-Fighting Equipment and Precautions: 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 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
Crystalline silica (quartz)	50 µg/m ³ (8-hr TWA)	25 µg/m ³ (respirable)	50 µg/m ³ (respirable)
Portland cement	15 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 carbonate	15 mg/m ³ (total) 5 mg/m ³ (respirable)	10 mg/m ³	10 mg/m ³ (total) 5 mg/m ³ (respirable)
Ferric oxide	10 mg/m ³	5 mg/m ³ (iron oxide dust; dust as Fe)	None established
Gypsum	15 mg/m ³ TWA (total dust) 5 mg/m ³ TWA (respirable fraction)	10 mg/m ³	None established
Magnesium oxide	15 mg/m ³	10 mg/m ³	None established
Calcium oxide	5 mg/m ³	2 mg/m ³	

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

Face and eyes: Safety glasses with side shields or protective goggles should be worn while using this product. For extremely dusty conditions, non-vented goggles or goggles with indirect venting are recommended. Avoid contact lens wear when using this product.

Body: Avoid any skin contact, particularly when skin may be wet from sweat. Long sleeved shirts and trousers should be worn while using this material. 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: If exposure levels cannot be maintained below an acceptable limits, suitable particulate-filtering facemasks or respirators approved by MSHA/NIOSH should be worn in accordance with the user's respiratory protection program and OSHA/MSHA guidelines.



Hands: Protective gloves with wrist/arm cutoffs should be worn to avoid direct contact with skin and to protect hands from abrasion.

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:	White or Gray or gray-brown powder.
Odor:	No significant odor.
Physical State:	Powder.
Flash Point:	Noncombustible.
Flammable Limits:	N/A
Boiling Point:	>2700°F
Melting Point:	>2700°F
Specific Gravity:	2.6 to 3.15
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:	Reacts with water forming heat and calcium hydroxide.
Chemical Stability:	Stable at normal temperatures and pressure.
Possibility of Hazardous Reactions:	None. Hazardous polymerization will not occur.
Conditions to Avoid:	Moisture or wetting will cause exothermic heating as product cures.
Incompatible Materials:	Avoid contact with strong acids, oxidizers, aluminum and aluminum salts.
Hazardous Decomposition:	Reacts with water to form calcium hydroxide which can irritate/damage skin. Cement dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Material is not likely to decompose. Abrasion can create very fine particles that can get deep into the lungs (respirable size).

Section 11: Toxicological Information

Information on toxicological effects:

Not considered acutely toxic.



Can damage the eyes, skin and respiratory system.

Portland cement and lime are caustic and abrasive to the skin. In contact with water or moisture, they 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.

Respirable crystalline silica is categorized as a Health Hazard Carcinogen Category 1A (known to have carcinogenic potential for humans) and a Health Hazard Specific Target Organ Toxicity – Repeated Exposure Category 1. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.

Crystalline silica is listed as carcinogenic according to IARC. ACGIH classified crystalline silica as a suspected human carcinogen.

Portland cement and lime 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.

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

Skin Corrosion/ Irritation:	Causes skin irritation.
Serious Eye Damage/Irritation:	Causes serious eye damage.
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:	
Carcinogenicity:	May cause cancer.
Germ Cell Mutagenicity:	Based on available data, the classification criteria are not met.
Reproductive Toxicity:	
Developmental:	Based on available data, the classification criteria are not met.
Teratogenicity:	Based on available data, the classification criteria are not met.
Embryo toxicity:	Based on available data, the classification criteria are not met.
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

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

Ecotoxicity:
Not considered hazardous to the aquatic environment or to the ozone layer.

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

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.

Special Considerations

Avoid creating or breathing dust during disposal. Avoid contact with eyes. Refer to Section 8 for personal protection measures.

Section 14: Transportation

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

Section 15: Regulatory Information

Component Analysis

U.S. Federal Regulations

This product contains one or more of the following chemical components or ingredients that may require identification and/or reporting under SARA Section 302, SARA Sections 311/312/313, CERCLA, and/or TSCA. An examination of the components of



this product should be conducted by a qualified environmental professional to determine if such identification or reporting is required by federal law.

Components: Portland cement, Silica (Crystalline)

U.S. State Regulations

This product contains one or more of the following chemical components or ingredients that are included on the hazardous materials list for one or more of the following states: California, Maine, Minnesota, New Jersey, Pennsylvania and Rhode Island. An examination of the components of this product should be conducted by a qualified environmental or safety and health professional to determine the specific requirements for those states.

Components: Portland cement, Limestone (calcium carbonate), Silica (Crystalline)

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



WARNING: Cancer - www.P65Warnings.ca.gov

Section 16: Other Information

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

Date of Preparation: November 27, 2018
Version: 1.0

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NOTE: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products. Before using any product, read its label and safety data sheet.