



3701 Fortified Mortar Bed

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).
Revision Date: 07/08/2019 Date of Issue: 06/13/2019 Version: 1.1

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: 3701 Fortified Mortar Bed

Product Code: 0229-0060-21 (100, 105, 120, 130), 0229-0060-41 (100)

1.2. Intended Use of the Product

Mortar

1.3. Name, Address, and Telephone of the Responsible Party

Company

LATICRETE International

1 Laticrete Park, N

Bethany, CT 06524

T (203)-393-0010

www.laticrete.com

Company

LATICRETE Canada ULC

PO Box 129, Emeryville, Ontario, Canada

NOR-1A0

(833)-254-9255

1.4. Emergency Telephone Number

Emergency Number : For Chemical Emergency Call ChemTel day or night

Within USA and Canada: 1.800.255.3924

Mexico: 1.800.099.0731

Outside USA and Canada: 1.813.248.0585 (collect calls accepted)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US/CA Classification

Skin Corr. 1C H314

Eye Dam. 1 H318

Skin Sens. 1 H317

Carc. 1A H350

STOT SE 3 H335

STOT RE 1 H372

Full text of hazard classes and H-statements : see section 16

2.2. Label Elements

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA)



Signal Word (GHS-US/CA)

: Danger

Hazard Statements (GHS-US/CA)

: 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 (lungs) through prolonged or repeated exposure (Inhalation).

Precautionary Statements (GHS-US/CA)

: 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 face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.

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P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, and eye protection.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304+P340 - IF INHALED: Remove person to fresh air and keep 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.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P310 - Immediately call a POISON CENTER or doctor.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see section 4 on this SDS).
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 in accordance with local, regional, national, territorial, provincial, and international regulations.

2.3. Other Hazards

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

2.4. Unknown Acute Toxicity (GHS-US/CA)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product Identifier | % * | GHS Ingredient Classification |
|---|----------------------|----------------------|--|
| Quartz | (CAS-No.) 14808-60-7 | 67 - 74 | Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372 |
| Cement, portland, chemicals | (CAS-No.) 65997-15-1 | 26 - 32 | Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 |
| Calcium oxide | (CAS-No.) 1305-78-8 | 14 - 22 | Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 3, H402 |
| Limestone | (CAS-No.) 1317-65-3 | 1.3 - 1.6 | Not classified |
| Silicic acid (H ₄ SiO ₄), calcium salt (1:2) | (CAS-No.) 10034-77-2 | 0.8 - 1.6 | Eye Irrit. 2A, H319 |
| Calcium sulfate dihydrate | (CAS-No.) 13397-24-5 | 1.3 - 1.6 | Not classified |
| Magnesium oxide (MgO) | (CAS-No.) 1309-48-4 | 0.8 - 1 | Not classified |
| Chromium, ion (Cr ⁶⁺) | (CAS-No.) 18540-29-9 | 0.00002 - 0.00003 | Skin Sens. 1, H317 Carc. 1B, H350 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |

Full text of H-phrases: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

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General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

Skin Contact: Immediately remove contaminated clothing. Immediately flush skin with plenty of water for at least 30 minutes. Get immediate medical advice/attention.

Eye Contact: Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: May cause respiratory irritation. May cause cancer (Inhalation). Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation). Skin sensitization. Causes severe skin burns and eye damage.

Inhalation: Irritation of the respiratory tract and the other mucous membranes. Dust may be harmful or cause irritation.

Skin Contact: When this product is wet it is corrosive. Cement may cause dry skin, discomfort, irritation, severe burns, and dermatitis. Exposure of sufficient duration to wet cement, or to dry cement on moist areas of the body, can cause serious, potentially irreversible damage to skin, eye, respiratory and digestive tracts due to chemical (caustic) burns, including third degree burns. A skin exposure may be hazardous even if there is no pain or discomfort. Cement is capable of causing dermatitis by irritation and allergy. Skin affected by dermatitis may include symptoms such as, redness, itching, rash, scaling, and cracking. Irritant dermatitis is caused by the physical properties of cement including alkalinity and abrasion. Allergic contact dermatitis is caused by sensitization to hexavalent chromium (chromate) present in cement. The reaction can range from a mild rash to severe skin ulcers. Persons already sensitized may react to the first contact with cement. Others may develop allergic dermatitis after years of repeated contact with cement.

Eye Contact: Concrete may cause immediate or delayed irritation or inflammation. Eye contact with wet concrete can cause moderate eye irritation, chemical burns and blindness. Eye exposures require immediate first aid and medical attention to prevent significant damage to the eye.

Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: May cause cancer (Inhalation). Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation). Long term exposure to respirable crystalline silica results in a significant risk of developing silicosis and other non-malignant respiratory disease, lung cancer, kidney effects, and immune system effects.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Calcium oxide reacts with water to form corrosive calcium hydroxide, with evolution of much heat. Temperatures as high as 800° C (1472 °F) have been reached with addition of water (moisture in air or soil). Quartz (silica) will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Crystalline silica exists in several forms, the most common of which is quartz. If crystalline silica (quartz) is heated to more than 870°C (1598 °F), it can change to a form of crystalline silica known as tridymite, and if crystalline silica (quartz) is heated to more than 1470°C (2678 °F), it can change to a form of crystalline silica known as cristobalite. The OSHA PEL for crystalline silica as tridymite and cristobalite is one-half of the OSHA PEL for crystalline silica (quartz).

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5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not handle until all safety precautions have been read and understood.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Cautiously neutralize spilled solid.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: May release corrosive vapors.

Precautions for Safe Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with eyes, skin and clothing. Do not breathe dust. Handle empty containers with care because they may still present a hazard.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. Store in original container or corrosive resistant and/or lined container.

Incompatible Materials: Strong acid. Strong oxidizers. Calcium oxide reacts with water to form corrosive calcium hydroxide, with evolution of much heat. Temperatures as high as 800° C (1472 °F) have been reached with addition of water (moisture in air or soil).

7.3. Specific End Use(s)

Mortar

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

| Particulates not otherwise classified (PNOC) (Not applicable) | | |
|---|-------------------------------------|--|
| USA ACGIH | ACGIH TWA (mg/m ³) | 3 mg/m ³ Respirable fraction 10 mg/m ³ Total Dust |
| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 5 mg/m ³ Respirable fraction 15 mg/m ³ Total Dust |
| Alberta | OEL TWA (mg/m ³) | 10 mg/m ³ (total) |

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| | | |
|---|--------------------------------------|--|
| | | 3 mg/m ³ (respirable) |
| British Columbia | OEL TWA (mg/m ³) | 10 mg/m ³ (nuisance dust-total dust) 3 mg/m ³ (nuisance dust-respirable fraction) |
| Manitoba | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable particles, recommended) 3 mg/m ³ (respirable particles, recommended) |
| New Brunswick | OEL TWA (mg/m ³) | 3 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction) 10 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica, inhalable fraction) |
| Newfoundland & Labrador | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable particles, recommended) 3 mg/m ³ (respirable particles, recommended) |
| Nova Scotia | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable particles, recommended) 3 mg/m ³ (respirable particles, recommended) |
| Nunavut | OEL STEL (mg/m ³) | 20 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 6 mg/m ³ (insoluble or poorly soluble-respirable fraction) |
| Nunavut | OEL TWA (mg/m ³) | 10 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 3 mg/m ³ (insoluble or poorly soluble-respirable fraction) |
| Northwest Territories | OEL STEL (mg/m ³) | 20 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 6 mg/m ³ (insoluble or poorly soluble-respirable fraction) |
| Northwest Territories | OEL TWA (mg/m ³) | 10 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 3 mg/m ³ (insoluble or poorly soluble-respirable fraction) |
| Ontario | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable) 3 mg/m ³ (respirable) |
| Prince Edward Island | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable particles, recommended) 3 mg/m ³ (respirable particles, recommended) |
| Québec | VEMP (mg/m ³) | 10 mg/m ³ (including dust, inert or nuisance particulates-total dust) |
| Saskatchewan | OEL STEL (mg/m ³) | 20 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 6 mg/m ³ (insoluble or poorly soluble-respirable fraction) |
| Saskatchewan | OEL TWA (mg/m ³) | 10 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 3 mg/m ³ (insoluble or poorly soluble-respirable fraction) |
| Calcium sulfate dihydrate (13397-24-5) | | |
| USA ACGIH | ACGIH TWA (mg/m ³) | 10 mg/m ³ (inhalable particulate matter (Calcium sulfate)) |
| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction) |
| USA NIOSH | NIOSH REL (TWA) (mg/m ³) | 10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust) |
| Alberta | OEL TWA (mg/m ³) | 10 mg/m ³ (Calcium sulphate) |
| British Columbia | OEL STEL (mg/m ³) | 20 mg/m ³ (total) |
| British Columbia | OEL TWA (mg/m ³) | 10 mg/m ³ (total dust) 3 mg/m ³ (respirable fraction) |
| Manitoba | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable particulate matter (Calcium sulfate)) |
| Newfoundland & Labrador | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable particulate matter (Calcium sulfate)) |
| Nova Scotia | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable particulate matter (Calcium sulfate)) |
| Ontario | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable (Calcium sulfate)) |
| Prince Edward Island | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable particulate matter (Calcium sulfate)) |
| Québec | VEMP (mg/m ³) | 10 mg/m ³ (containing no Asbestos and <1% Crystalline silica-total dust) 5 mg/m ³ (containing no Asbestos and <1% Crystalline silica-respirable dust) |
| Saskatchewan | OEL STEL (mg/m ³) | 20 mg/m ³ |
| Saskatchewan | OEL TWA (mg/m ³) | 10 mg/m ³ |
| Yukon | OEL STEL (mg/m ³) | 20 mg/m ³ |

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| | | |
|--|--------------------------------------|--|
| Yukon | OEL TWA (mg/m ³) | 30 mppcf 10 mg/m ³ |
| Chromium, ion (Cr6+) (18540-29-9) | | |
| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 5 µg/m ³ |
| Magnesium oxide (MgO) (1309-48-4) | | |
| USA ACGIH | ACGIH TWA (mg/m ³) | 10 mg/m ³ (inhalable particulate matter) |
| USA ACGIH | ACGIH chemical category | Not Classifiable as a Human Carcinogen |
| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 15 mg/m ³ (fume, total particulate) |
| USA IDLH | US IDLH (mg/m ³) | 750 mg/m ³ (fume) |
| Alberta | OEL TWA (mg/m ³) | 10 mg/m ³ (fume) |
| British Columbia | OEL STEL (mg/m ³) | 10 mg/m ³ (respirable dust and fume) |
| British Columbia | OEL TWA (mg/m ³) | 10 mg/m ³ (fume, inhalable) 3 mg/m ³ (respirable dust and fume) |
| Manitoba | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable particulate matter) |
| New Brunswick | OEL TWA (mg/m ³) | 10 mg/m ³ (fume) |
| Newfoundland & Labrador | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable particulate matter) |
| Nova Scotia | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable particulate matter) |
| Nunavut | OEL STEL (mg/m ³) | 20 mg/m ³ (inhalable fraction) |
| Nunavut | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable fraction) |
| Northwest Territories | OEL STEL (mg/m ³) | 20 mg/m ³ (inhalable fraction) |
| Northwest Territories | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable fraction) |
| Ontario | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable) |
| Prince Edward Island | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable particulate matter) |
| Québec | VEMP (mg/m ³) | 10 mg/m ³ (fume) |
| Saskatchewan | OEL STEL (mg/m ³) | 20 mg/m ³ (inhalable fraction) |
| Saskatchewan | OEL TWA (mg/m ³) | 10 mg/m ³ (inhalable fraction) |
| Yukon | OEL STEL (mg/m ³) | 10 mg/m ³ (fume) |
| Yukon | OEL TWA (mg/m ³) | 10 mg/m ³ (fume) |
| Limestone (1317-65-3) | | |
| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction) |
| USA NIOSH | NIOSH REL (TWA) (mg/m ³) | 10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust) |
| Alberta | OEL TWA (mg/m ³) | 10 mg/m ³ |
| British Columbia | OEL STEL (mg/m ³) | 20 mg/m ³ (total) |
| British Columbia | OEL TWA (mg/m ³) | 10 mg/m ³ (total dust) 3 mg/m ³ (respirable fraction) |
| New Brunswick | OEL TWA (mg/m ³) | 10 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica) |
| Nunavut | OEL STEL (mg/m ³) | 20 mg/m ³ |
| Nunavut | OEL TWA (mg/m ³) | 10 mg/m ³ |
| Northwest Territories | OEL STEL (mg/m ³) | 20 mg/m ³ |
| Northwest Territories | OEL TWA (mg/m ³) | 10 mg/m ³ |
| Québec | VEMP (mg/m ³) | 10 mg/m ³ (Limestone, containing no Asbestos and <1% Crystalline silica-total dust) |
| Saskatchewan | OEL STEL (mg/m ³) | 20 mg/m ³ |
| Saskatchewan | OEL TWA (mg/m ³) | 10 mg/m ³ |
| Yukon | OEL STEL (mg/m ³) | 20 mg/m ³ |
| Yukon | OEL TWA (mg/m ³) | 30 mppcf 10 mg/m ³ |
| Quartz (14808-60-7) | | |
| USA ACGIH | ACGIH TWA (mg/m ³) | 0.025 mg/m ³ (respirable particulate matter) |

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| | | |
|---|--------------------------------------|---|
| USA ACGIH | ACGIH chemical category | A2 - Suspected Human Carcinogen |
| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 50 µg/m ³ (Respirable crystalline silica) |
| USA NIOSH | NIOSH REL (TWA) (mg/m ³) | 0.05 mg/m ³ (respirable dust) |
| USA IDLH | US IDLH (mg/m ³) | 50 mg/m ³ (respirable dust) |
| Alberta | OEL TWA (mg/m ³) | 0.025 mg/m ³ (respirable particulate) |
| British Columbia | OEL TWA (mg/m ³) | 0.025 mg/m ³ (respirable) |
| Manitoba | OEL TWA (mg/m ³) | 0.025 mg/m ³ (respirable particulate matter) |
| New Brunswick | OEL TWA (mg/m ³) | 0.1 mg/m ³ (respirable fraction) |
| Newfoundland & Labrador | OEL TWA (mg/m ³) | 0.025 mg/m ³ (respirable particulate matter) |
| Nova Scotia | OEL TWA (mg/m ³) | 0.025 mg/m ³ (respirable particulate matter) |
| Nunavut | OEL TWA (mg/m ³) | 0.05 mg/m ³ (respirable fraction (Silica - crystalline)) |
| Northwest Territories | OEL TWA (mg/m ³) | 0.05 mg/m ³ (respirable fraction (Silica - crystalline)) |
| Ontario | OEL TWA (mg/m ³) | 0.1 mg/m ³ (designated substances regulation-respirable (Silica, crystalline)) |
| Prince Edward Island | OEL TWA (mg/m ³) | 0.025 mg/m ³ (respirable particulate matter) |
| Québec | VEMP (mg/m ³) | 0.1 mg/m ³ (respirable dust) |
| Saskatchewan | OEL TWA (mg/m ³) | 0.05 mg/m ³ (respirable fraction (Silica - crystalline (Trydimite removed))) |
| Yukon | OEL TWA (mg/m ³) | 300 particle/mL (Silica - Quartz, crystalline) |
| Calcium oxide (1305-78-8) | | |
| USA ACGIH | ACGIH TWA (mg/m ³) | 2 mg/m ³ |
| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 5 mg/m ³ |
| USA NIOSH | NIOSH REL (TWA) (mg/m ³) | 2 mg/m ³ |
| USA IDLH | US IDLH (mg/m ³) | 25 mg/m ³ |
| Alberta | OEL TWA (mg/m ³) | 2 mg/m ³ |
| British Columbia | OEL TWA (mg/m ³) | 2 mg/m ³ |
| Manitoba | OEL TWA (mg/m ³) | 2 mg/m ³ |
| New Brunswick | OEL TWA (mg/m ³) | 2 mg/m ³ |
| Newfoundland & Labrador | OEL TWA (mg/m ³) | 2 mg/m ³ |
| Nova Scotia | OEL TWA (mg/m ³) | 2 mg/m ³ |
| Nunavut | OEL STEL (mg/m ³) | 4 mg/m ³ |
| Nunavut | OEL TWA (mg/m ³) | 2 mg/m ³ |
| Northwest Territories | OEL STEL (mg/m ³) | 4 mg/m ³ |
| Northwest Territories | OEL TWA (mg/m ³) | 2 mg/m ³ |
| Ontario | OEL TWA (mg/m ³) | 2 mg/m ³ |
| Prince Edward Island | OEL TWA (mg/m ³) | 2 mg/m ³ |
| Québec | VEMP (mg/m ³) | 2 mg/m ³ |
| Saskatchewan | OEL STEL (mg/m ³) | 4 mg/m ³ |
| Saskatchewan | OEL TWA (mg/m ³) | 2 mg/m ³ |
| Yukon | OEL STEL (mg/m ³) | 4 mg/m ³ |
| Yukon | OEL TWA (mg/m ³) | 2 mg/m ³ |
| Cement, portland, chemicals (65997-15-1) | | |
| USA ACGIH | ACGIH TWA (mg/m ³) | 1 mg/m ³ (particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter) |
| USA ACGIH | ACGIH chemical category | Not Classifiable as a Human Carcinogen |
| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction) |
| USA NIOSH | NIOSH REL (TWA) (mg/m ³) | 10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust) |
| USA IDLH | US IDLH (mg/m ³) | 5000 mg/m ³ |
| Alberta | OEL TWA (mg/m ³) | 10 mg/m ³ |
| British Columbia | OEL TWA (mg/m ³) | 1 mg/m ³ (particulate matter containing no Asbestos and |

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| | | |
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| | | <1% Crystalline silica-respirable particulate) |
| Manitoba | OEL TWA (mg/m ³) | 1 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter-particulate matter, respirable particulate matter) |
| New Brunswick | OEL TWA (mg/m ³) | 10 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica) |
| Newfoundland & Labrador | OEL TWA (mg/m ³) | 1 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter-particulate matter, respirable particulate matter) |
| Nova Scotia | OEL TWA (mg/m ³) | 1 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter-particulate matter, respirable particulate matter) |
| Nunavut | OEL STEL (mg/m ³) | 20 mg/m ³ |
| Nunavut | OEL TWA (mg/m ³) | 10 mg/m ³ |
| Northwest Territories | OEL STEL (mg/m ³) | 20 mg/m ³ |
| Northwest Territories | OEL TWA (mg/m ³) | 10 mg/m ³ |
| Ontario | OEL TWA (mg/m ³) | 1 mg/m ³ (containing no Asbestos and <1% Crystalline silica-respirable) |
| Prince Edward Island | OEL TWA (mg/m ³) | 1 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter-particulate matter, respirable particulate matter) |
| Québec | VEMP (mg/m ³) | 10 mg/m ³ (containing no Asbestos and <1% Crystalline silica-total dust) 5 mg/m ³ (containing no Asbestos and <1% Crystalline silica-respirable dust) |
| Saskatchewan | OEL STEL (mg/m ³) | 20 mg/m ³ |
| Saskatchewan | OEL TWA (mg/m ³) | 10 mg/m ³ |
| Yukon | OEL STEL (mg/m ³) | 20 mg/m ³ |
| Yukon | OEL TWA (mg/m ³) | 30 mppcf 10 mg/m ³ |

8.2. Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection. Face shield.



Materials for Protective Clothing: Chemically resistant materials and fabrics. Corrosion-proof clothing.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles and face shield.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Solid

Appearance : Grey Powder

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| | |
|---|--------------------|
| Odor | : Not available |
| Odor Threshold | : Not available |
| pH | : Not available |
| Evaporation Rate | : Not available |
| Melting Point | : Not available |
| Freezing Point | : Not available |
| Boiling Point | : Not available |
| Flash Point | : Not available |
| Auto-ignition Temperature | : Not available |
| Decomposition Temperature | : Not available |
| Flammability (solid, gas) | : Not available |
| Lower Flammable Limit | : Not available |
| Upper Flammable Limit | : Not available |
| Vapor Pressure | : Not available |
| Relative Vapor Density at 20°C | : Not available |
| Relative Density | : Not available |
| Specific Gravity | : Not available |
| Solubility | : Water: Insoluble |
| Partition Coefficient: N-Octanol/Water | : Not available |
| Viscosity | : Not available |

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Calcium oxide reacts with water to form corrosive calcium hydroxide, with evolution of much heat. Temperatures as high as 800° C (1472 °F) have been reached with addition of water (moisture in air or soil). Quartz (silica) will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. Incompatible Materials:** Strong acid. Strong oxidizers. Calcium oxide reacts with water to form corrosive calcium hydroxide, with evolution of much heat. Temperatures as high as 800° C (1472 °F) have been reached with addition of water (moisture in air or soil).
- 10.6. Hazardous Decomposition Products:** Thermal decomposition generates: Corrosive vapors. Limestone and Dolomite decomposes at 825 °C (1517 °F) producing Calcium and Magnesium Oxide. Adding water produces (caustic) calcium hydroxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

- Acute Toxicity (Oral):** Not classified
- Acute Toxicity (Dermal):** Not classified
- Acute Toxicity (Inhalation):** Not classified
- LD50 and LC50 Data:** Not available
- Skin Corrosion/Irritation:** Causes severe skin burns and eye damage.
- Eye Damage/Irritation:** Causes serious eye damage.
- Respiratory or Skin Sensitization:** May cause an allergic skin reaction.
- Germ Cell Mutagenicity:** Not classified
- Carcinogenicity:** May cause cancer (Inhalation).
- Specific Target Organ Toxicity (Repeated Exposure):** Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).
- Reproductive Toxicity:** Not classified
- Specific Target Organ Toxicity (Single Exposure):** May cause respiratory irritation.
- Aspiration Hazard:** Not classified
- Symptoms/Injuries After Inhalation:** Irritation of the respiratory tract and the other mucous membranes. Dust may be harmful or cause irritation.

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Symptoms/Injuries After Skin Contact: When this product is wet it is corrosive. Cement may cause dry skin, discomfort, irritation, severe burns, and dermatitis. Exposure of sufficient duration to wet cement, or to dry cement on moist areas of the body, can cause serious, potentially irreversible damage to skin, eye, respiratory and digestive tracts due to chemical (caustic) burns, including third degree burns. A skin exposure may be hazardous even if there is no pain or discomfort. Cement is capable of causing dermatitis by irritation and allergy. Skin affected by dermatitis may include symptoms such as, redness, itching, rash, scaling, and cracking. Irritant dermatitis is caused by the physical properties of cement including alkalinity and abrasion. Allergic contact dermatitis is caused by sensitization to hexavalent chromium (chromate) present in cement. The reaction can range from a mild rash to severe skin ulcers. Persons already sensitized may react to the first contact with cement. Others may develop allergic dermatitis after years of repeated contact with cement.

Symptoms/Injuries After Eye Contact: Concrete may cause immediate or delayed irritation or inflammation. Eye contact with wet concrete can cause moderate eye irritation, chemical burns and blindness. Eye exposures require immediate first aid and medical attention to prevent significant damage to the eye.

Symptoms/Injuries After Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: May cause cancer (Inhalation). Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation). Long term exposure to respirable crystalline silica results in a significant risk of developing silicosis and other non-malignant respiratory disease, lung cancer, kidney effects, and immune system effects.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

| | |
|---|---|
| Magnesium oxide (MgO) (1309-48-4) | |
| LD50 Oral Rat | 3870 mg/kg |
| Quartz (14808-60-7) | |
| LD50 Oral Rat | > 5000 mg/kg |
| LD50 Dermal Rat | > 5000 mg/kg |
| Calcium oxide (1305-78-8) | |
| LD50 Oral Rat | > 2000 mg/kg |
| LD50 Dermal Rabbit | > 2500 mg/kg |
| Chromium, ion (Cr6+) (18540-29-9) | |
| IARC Group | 1 |
| OSHA Hazard Communication Carcinogen List | In OSHA Hazard Communication Carcinogen list. |
| OSHA Specifically Regulated Carcinogen List | In OSHA Specifically Regulated Carcinogen list. |
| Quartz (14808-60-7) | |
| IARC Group | 1 |
| National Toxicology Program (NTP) Status | Known Human Carcinogens. |
| OSHA Hazard Communication Carcinogen List | In OSHA Hazard Communication Carcinogen list. |

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

| | |
|--|--|
| Chromium, ion (Cr6+) (18540-29-9) | |
| LC50 Fish 1 | 36.2 mg/l (Exposure time: 96 h - Species: Pimephales promelas) |
| LC50 Fish 2 | 7.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss) |
| Calcium oxide (1305-78-8) | |
| LC50 Fish 1 | 50.6 mg/l |

12.2. Persistence and Degradability

| | |
|----------------------------------|------------------|
| 3701 Fortified Mortar Bed | |
| Persistence and Degradability | Not established. |

12.3. Bioaccumulative Potential

| | |
|----------------------------------|----------------------|
| 3701 Fortified Mortar Bed | |
| Bioaccumulative Potential | Not established. |
| Calcium oxide (1305-78-8) | |
| BCF Fish 1 | (no bioaccumulation) |

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12.4. Mobility in Soil Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

14.4. In Accordance with TDG Not regulated for transport


SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

| 3701 Fortified Mortar Bed | |
|---|--|
| SARA Section 311/312 Hazard Classes | Health hazard - Specific target organ toxicity (single or repeated exposure) Health hazard - Carcinogenicity Health hazard - Respiratory or skin sensitization Health hazard - Serious eye damage or eye irritation Health hazard - Skin corrosion or Irritation |
| Silicic acid (H4SiO4), calcium salt (1:2) (10034-77-2) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Magnesium oxide (MgO) (1309-48-4) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Limestone (1317-65-3) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Quartz (14808-60-7) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Calcium oxide (1305-78-8) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Cement, portland, chemicals (65997-15-1) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |

15.2. US State Regulations

California Proposition 65

 **WARNING:** This product can expose you to Chromium, ion (Cr6+), which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

| Chemical Name (CAS No.) | Carcinogenicity | Developmental Toxicity | Female Reproductive Toxicity | Male Reproductive Toxicity |
|-----------------------------------|-----------------|------------------------|------------------------------|----------------------------|
| Chromium, ion (Cr6+) (18540-29-9) | X | X | | |
| Quartz (14808-60-7) | X | | | |

| Calcium sulfate dihydrate (13397-24-5) | | | | |
|--|--|--|--|--|
| U.S. - New Jersey - Right to Know Hazardous Substance List | | | | |
| U.S. - Pennsylvania - RTK (Right to Know) List | | | | |

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| |
|---|
| Chromium, ion (Cr6+) (18540-29-9) |
| U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List |
| Magnesium oxide (MgO) (1309-48-4) |
| U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List |
| Limestone (1317-65-3) |
| U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List |
| Quartz (14808-60-7) |
| U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List |
| Calcium oxide (1305-78-8) |
| U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List |
| Cement, portland, chemicals (65997-15-1) |
| U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List |

15.3. Canadian Regulations

| |
|---|
| Calcium sulfate dihydrate (13397-24-5) |
| Listed on the Canadian DSL (Domestic Substances List) |
| Silicic acid (H4SiO4), calcium salt (1:2) (10034-77-2) |
| Listed on the Canadian DSL (Domestic Substances List) |
| Magnesium oxide (MgO) (1309-48-4) |
| Listed on the Canadian DSL (Domestic Substances List) |
| Limestone (1317-65-3) |
| Listed on the Canadian NDSL (Non-Domestic Substances List) |
| Quartz (14808-60-7) |
| Listed on the Canadian DSL (Domestic Substances List) |
| Calcium oxide (1305-78-8) |
| Listed on the Canadian DSL (Domestic Substances List) |
| Cement, portland, chemicals (65997-15-1) |
| Listed on the Canadian DSL (Domestic Substances List) |

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 07/08/2019

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

| | |
|-------------------|--|
| Aquatic Acute 1 | Hazardous to the aquatic environment - Acute Hazard Category 1 |
| Aquatic Acute 3 | Hazardous to the aquatic environment - Acute Hazard Category 3 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment - Chronic Hazard Category 1 |
| Carc. 1A | Carcinogenicity Category 1A |

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| | |
|---------------|--|
| Carc. 1B | Carcinogenicity Category 1B |
| Eye Dam. 1 | Serious eye damage/eye irritation Category 1 |
| Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A |
| Skin Corr. 1C | Skin corrosion/irritation Category 1C |
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| Skin Sens. 1 | Skin sensitization, Category 1 |
| STOT RE 1 | Specific target organ toxicity (repeated exposure) Category 1 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H314 | Causes severe skin burns and eye damage |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |
| H335 | May cause respiratory irritation |
| H350 | May cause cancer |
| H372 | Causes damage to organs through prolonged or repeated exposure |
| H400 | Very toxic to aquatic life |
| H402 | Harmful to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015 (Can, US)