SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: PERMACOLOR® Grout


1.2. Intended Use of the Product

GROUT. For professional use only.

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 Inc. day or night:
(800)255-3924 (North America)
(800)-099-0731 (Mexico)
+1 (813)248-0585 (International - 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
PERMACOLOR® Grout
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).

GHS-US/CA Labeling
Hazard Pictograms (GHS-US/CA):
- GHS05
- GHS07
- GHS08

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.
- P272 - Contaminated work clothing should not be allowed out of the workplace.
- P280 - Wear protective gloves, protective clothing, and eye protection.
- P301+P330+P353 - 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

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>% *</th>
<th>GHS Ingredient Classification</th>
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<tbody>
<tr>
<td>Quartz</td>
<td>(CAS-No.) 14808-60-7</td>
<td>48 - 60</td>
<td>Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372</td>
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<tr>
<td>Cement, alumina, chemicals</td>
<td>(CAS-No.) 65997-16-2</td>
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<td>Eye Irrit. 2A, H319</td>
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<tr>
<td>Iron oxide (Fe3O4)</td>
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<td>0.001 - 6</td>
<td>Comb. Dust</td>
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<tr>
<td>Calcium sulfate</td>
<td>(CAS-No.) 7778-18-9</td>
<td>3 - 7</td>
<td>Not classified</td>
</tr>
</tbody>
</table>
**SECTION 4: FIRST AID MEASURES**

4.1. Description of First-aid Measures

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

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**PERMACOLOR® Grout**

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).

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS-No.</th>
<th>Concentration</th>
<th>Health危害</th>
<th>Label Type</th>
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<td>Acute Tox. 4 (Oral), H302</td>
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<td></td>
<td>Eye Dam. 1, H318</td>
<td>Acute Tox. 3 (Dermal), H311</td>
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<td></td>
<td></td>
<td>Skin Sens. 1, H317</td>
<td>Acute Tox. 4 (Inhalation), H332</td>
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<td>Kaolin</td>
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<td>Aquatic Acute 3, H402</td>
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<td>Eye Dam. 1, H318</td>
<td>Aquatic Chronic 3, H412</td>
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<tr>
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<tr>
<td>Tremolite</td>
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<tr>
<td>Methacrylic acid</td>
<td>79-41-4</td>
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<td>Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 3, H402</td>
<td></td>
</tr>
<tr>
<td>Chromium, ion (Cr6+)</td>
<td>18540-29-9</td>
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<td></td>
</tr>
</tbody>
</table>

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%).

**The actual concentration of ingredient(s) is withheld as a trade secret in accordance with the Hazardous Products Regulations (HPR) SOR/2015-17 and 29 CFR 1910.1200.

**PERMACOLOR® Grout**

Safety Data Sheet

**Inhalation:** The three types of silicosis include: 1) Simple chronic silicosis – which results from long-term exposure (more than 20 years) to low amounts of respirable crystalline silica. Nodules of chronic inflammation and scarring provoked by the respirable crystalline silica form in the lungs and chest lymph nodes. This disease may feature breathlessness and may resemble chronic obstructive pulmonary disease (COPD); 2) Accelerated silicosis – occurs after exposure to larger amounts of respirable crystalline silica over a shorter period of time (5-15 years); 3) Acute silicosis – results from short-term exposure to very large amounts of respirable crystalline silica. The lungs become very inflamed and may fill with fluid, causing severe shortness of breath and low blood oxygen levels. Inflammation, scarring, and symptoms progress faster in accelerated silicosis than in simple silicosis. Progressive massive fibrosis may occur in simple or accelerated silicosis, but is more common in the accelerated form. Progressive massive fibrosis results from severe scarring and leads to the destruction of normal lung structures. Irritation of the respiratory tract and the other mucous membranes. May be corrosive to the respiratory tract.

**Skin Contact:** Concrete may cause dry skin, discomfort, irritation, severe burns, and dermatitis. Exposure of sufficient duration to wet concrete 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. Unhardened concrete 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 concrete including alkalinity and abrasion. Allergic contact dermatitis is caused by sensitization to hexavalent chromium (chromate) present in concrete. The reaction can range from a mild rash to severe skin ulcers. Persons already sensitized may react to the first contact with wet concrete. Others may develop allergic dermatitis after years of repeated contact with wet concrete.

**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:** Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation). Some studies show that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis may be associated with the increased incidence of several autoimmune disorders such as scleroderma (thickening of the skin), systemic lupus erythematosus, rheumatoid arthritis and diseases affecting the kidneys. Silicosis increases the risk of tuberculosis. Some studies show an increased incidence of chronic kidney disease and end-stage renal disease in workers exposed to respirable crystalline silica. May cause cancer by inhalation.

### 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:** Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical.

**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:** Quartz (silica) will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride. 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). Portland Cement reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete. Iron oxide present in this product may become unstable at temperatures above 120°F (49°C) and slowly auto-oxide to Fe₂O₃ to release additional heat which could be sufficient to cause combustible materials to ignite. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

### 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). Unidentified hydrocarbons. Metal oxides. Sulfur oxides.

### 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).

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: 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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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: Reactive or incompatible with the following materials: oxidizing materials, acids, aluminum and ammonium salt. Portland cement is highly alkaline and will react with acids to produce a violent, heat-generating reaction. Toxic gases or vapors may be given off depending on the acid involved. Reacts with acids, aluminum metals and ammonium salts. Aluminum powder and other alkali and alkaline earth elements will react in wet mortar or concrete, liberating hydrogen gas. Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts, and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosions. Silicates dissolve readily in hydrofluoric acid producing a corrosive gas — silicon tetrafluoride. Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

   Grout. For professional use only.

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.

<table>
<thead>
<tr>
<th>Cement, portland, chemicals (65997-15-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
</tr>
<tr>
<td>ACGIH TWA (mg/m³)</td>
</tr>
<tr>
<td>1 mg/m³ (particulate matter containing no asbestos and &lt;1% crystalline silica, respirable particulate matter)</td>
</tr>
</tbody>
</table>
## PERMACOLOR® Grout

### 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).

### Table of Standards

| Standard       | USA ACGIH                  | USA OSHA                  | USA NIOSH                  | USA IDLH                  | Alberta                  | British Columbia          | Manitoba                  | New Brunswick              | Quebec                     | Ontario                   | Prince Edward Island      | Ontario                   | Prince Edward Island      | Saskatchewan              | Saskatchewan              | Yukon                      | Yukon                      | Calcium oxide (1305-78-8) |
|----------------|----------------------------|---------------------------|----------------------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------------|----------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
|                | ACGIH chemical category    | OSHA PEL (TWA) (mg/m³)    | NIOSH REL (TWA) (mg/m³)    | US IDLH (mg/m³)           | OEL TWA (mg/m³)          | OEL TWA (mg/m³)           | OEL TWA (mg/m³)           | OEL TWA (mg/m³)           | OEL TWA (mg/m³)           | VEMP (mg/m³)              | OEL TWA (mg/m³)           | OEL STEL (mg/m³)          | OEL TWA (mg/m³)           | OEL STEL (mg/m³)          | OEL TWA (mg/m³)           | OEL TWA (mg/m³)           | Calcium oxide (1305-78-8) |
|                | Not Classifiable as a Human Carcinogen | 15 mg/m³ (total dust) | 10 mg/m³ (total dust) | 5000 mg/m³ | 10 mg/m³ | 1 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-respirable particulate matter) | 1 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter-respirable particulate matter, respirable particulate matter) | 10 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica) | 10 mg/m³ | 1 mg/m³ (containing no Asbestos and <1% Crystalline silica-respirable) | 1 mg/m³ (containing no Asbestos and <1% Crystalline silica-total dust) | 5 mg/m³ (containing no Asbestos and <1% Crystalline silica-respirable dust) | 20 mg/m³ | 10 mg/m³ | 20 mg/m³ | 20 mg/m³ | 30 mppcf |

### Standards by Region

- **USA ACGIH**: ACGIH chemical category
- **USA OSHA**: OSHA PEL (TWA) (mg/m³) 15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
- **USA NIOSH**: NIOSH REL (TWA) (mg/m³) 10 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
- **USA IDLH**: US IDLH (mg/m³) 5000 mg/m³
- **Alberta**: OEL TWA (mg/m³) 10 mg/m³
- **British Columbia**: OEL TWA (mg/m³) 1 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-respirable particulate matter)
- **Manitoba**: OEL TWA (mg/m³) 1 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter-respirable particulate matter, respirable particulate matter)
- **New Brunswick**: OEL TWA (mg/m³) 10 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica)
- **Newfoundland & Labrador**: OEL TWA (mg/m³) 1 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter-respirable particulate matter, respirable particulate matter)
- **Nova Scotia**: OEL TWA (mg/m³) 1 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter-respirable particulate matter, respirable particulate matter)
- **Nunavut**: OEL STEL (mg/m³) 20 mg/m³
- **Ontario**: OEL TWA (mg/m³) 1 mg/m³ (containing no Asbestos and <1% Crystalline silica-respirable)
- **Québec**: VEMP (mg/m³) 10 mg/m³ (containing no Asbestos and <1% Crystalline silica-total dust) 5 mg/m³ (containing no Asbestos and <1% Crystalline silica-respirable dust)
- **Saskatchewan**: OEL STEL (mg/m³) 20 mg/m³
- **Saskatchewan**: OEL TWA (mg/m³) 10 mg/m³
- **Yukon**: OEL STEL (mg/m³) 20 mg/m³
- **Yukon**: OEL TWA (mg/m³) 30 mppcf 10 mg/m³

### Standards for Calcium oxide (1305-78-8)

- **USA ACGIH**: ACGIH TWA (mg/m³) 2 mg/m³
- **USA OSHA**: OSHA PEL (TWA) (mg/m³) 5 mg/m³
- **USA NIOSH**: NIOSH REL (TWA) (mg/m³) 2 mg/m³
- **USA IDLH**: US IDLH (mg/m³) 25 mg/m³
- **Alberta**: OEL TWA (mg/m³) 2 mg/m³
- **British Columbia**: OEL TWA (mg/m³) 2 mg/m³
- **Manitoba**: OEL TWA (mg/m³) 2 mg/m³
- **New Brunswick**: OEL TWA (mg/m³) 2 mg/m³
- **Newfoundland & Labrador**: OEL TWA (mg/m³) 2 mg/m³
- **Nova Scotia**: OEL TWA (mg/m³) 2 mg/m³
- **Nunavut**: OEL STEL (mg/m³) 4 mg/m³
- **Nunavut**: OEL TWA (mg/m³) 2 mg/m³
- **Northwest Territories**: OEL STEL (mg/m³) 4 mg/m³
**PERMACOLOR® Grout**  
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).

<table>
<thead>
<tr>
<th>Province</th>
<th>OEL TWA (mg/m³)</th>
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<tbody>
<tr>
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<tr>
<td>Ontario</td>
<td>2 mg/m³</td>
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<tr>
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<td>Québec</td>
<td>2 mg/m³</td>
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<td>Saskatchewan</td>
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<td>Saskatchewan</td>
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<td>Yukon</td>
<td>2 mg/m³</td>
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**Quartz (14808-60-7)**

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<th>Region</th>
<th>OEL TWA (mg/m³)</th>
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<tr>
<td>USA ACGIH</td>
<td>0.025 mg/m³ (respirable particulate matter)</td>
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<td>USA ACGIH</td>
<td>A2 - Suspected Human Carcinogen</td>
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<tr>
<td>USA OSHA</td>
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<td>USA NIOSH</td>
<td>0.05 mg/m³ (respirable dust)</td>
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<td>Manitoba</td>
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</tr>
<tr>
<td>Ontario</td>
<td>0.1 mg/m³ (designated substances regulation-respirable (Silica, crystalline))</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>0.025 mg/m³ (respirable particulate matter)</td>
</tr>
<tr>
<td>Québec</td>
<td>0.1 mg/m³ (respirable dust)</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>0.05 mg/m³ (respirable fraction (Silica - crystalline (Trydimite removed)))</td>
</tr>
<tr>
<td>Yukon</td>
<td>300 particle/mL (Silica - Quartz, crystalline)</td>
</tr>
</tbody>
</table>

**Limestone (1317-65-3)**

<table>
<thead>
<tr>
<th>Region</th>
<th>OEL TWA (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA OSHA</td>
<td>15 mg/m³ (total dust)</td>
</tr>
<tr>
<td></td>
<td>5 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>10 mg/m³ (total dust)</td>
</tr>
<tr>
<td></td>
<td>5 mg/m³ (respirable dust)</td>
</tr>
<tr>
<td>Alberta</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>British Columbia</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td>British Columbia</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>3 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>10 mg/m³ (particulate matter containing no Asbestos and &lt;1% Crystalline silica)</td>
</tr>
<tr>
<td>Nunavut</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td>Nunavut</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Québec</td>
<td>10 mg/m³ (Limestone, containing no Asbestos and &lt;1% Crystalline silica-total dust)</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Yukon</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td>Yukon</td>
<td>10 mg/m³</td>
</tr>
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**Magnesium oxide (MgO) (1309-48-4)**

<table>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 mg/m³</td>
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12/03/2019 EN (English US)  
7/21
## PERMACOLOR® Grout

**Safety Data Sheet**


<table>
<thead>
<tr>
<th>Location</th>
<th>Regulation Type</th>
<th>Standard</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>USA ACGIH</strong></td>
<td></td>
<td></td>
<td>10 mg/m³ (inhalable particulate matter)</td>
</tr>
<tr>
<td><strong>USA ACGIH</strong></td>
<td></td>
<td></td>
<td>Not Classifiable as a Human Carcinogen</td>
</tr>
<tr>
<td><strong>USA OSHA</strong></td>
<td></td>
<td></td>
<td>15 mg/m³ (fume, total particulate)</td>
</tr>
<tr>
<td><strong>USA IDLH</strong></td>
<td></td>
<td></td>
<td>750 mg/m³ (fume)</td>
</tr>
<tr>
<td><strong>Alberta</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (fume)</td>
<td></td>
</tr>
<tr>
<td><strong>British Columbia</strong></td>
<td><strong>OEL STEL (mg/m³)</strong></td>
<td>10 mg/m³ (respirable dust and fume)</td>
<td></td>
</tr>
<tr>
<td><strong>Manitoba</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable particulate matter)</td>
<td></td>
</tr>
<tr>
<td><strong>New Brunswick</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (fume)</td>
<td></td>
</tr>
<tr>
<td><strong>Newfoundland &amp; Labrador</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable particulate matter)</td>
<td></td>
</tr>
<tr>
<td><strong>Nova Scotia</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable particulate matter)</td>
<td></td>
</tr>
<tr>
<td><strong>Nunavut</strong></td>
<td><strong>OEL STEL (mg/m³)</strong></td>
<td>20 mg/m³ (inhalable fraction)</td>
<td></td>
</tr>
<tr>
<td><strong>Nunavut</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable fraction)</td>
<td></td>
</tr>
<tr>
<td><strong>Northwest Territories</strong></td>
<td><strong>OEL STEL (mg/m³)</strong></td>
<td>20 mg/m³ (inhalable fraction)</td>
<td></td>
</tr>
<tr>
<td><strong>Northwest Territories</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable fraction)</td>
<td></td>
</tr>
<tr>
<td><strong>Ontario</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable)</td>
<td></td>
</tr>
<tr>
<td><strong>Prince Edward Island</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable particulate matter)</td>
<td></td>
</tr>
<tr>
<td><strong>Québec</strong></td>
<td><strong>VEMP (mg/m³)</strong></td>
<td>10 mg/m³ (fume)</td>
<td></td>
</tr>
<tr>
<td><strong>Saskatchewan</strong></td>
<td><strong>OEL STEL (mg/m³)</strong></td>
<td>20 mg/m³ (inhalable fraction)</td>
<td></td>
</tr>
<tr>
<td><strong>Saskatchewan</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable fraction)</td>
<td></td>
</tr>
<tr>
<td><strong>Yukon</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable)</td>
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</tr>
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**Chromium, ion (Cr6+) (18540-29-9)**

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<th>Regulation Type</th>
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<th>Limit</th>
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<tbody>
<tr>
<td><strong>USA OSHA</strong></td>
<td><strong>OSHA PEL (TWA) (mg/m³)</strong></td>
<td>5 µg/m³</td>
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**Calcium sulfate dihydrate (13397-24-5)**

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<th>Standard</th>
<th>Limit</th>
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</thead>
<tbody>
<tr>
<td><strong>USA ACGIH</strong></td>
<td><strong>ACGIH TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable particulate matter (Calcium sulfate))</td>
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</tr>
<tr>
<td><strong>USA OSHA</strong></td>
<td><strong>OSHA PEL (TWA) (mg/m³)</strong></td>
<td>15 mg/m³ (total dust)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td><strong>USA NIOSH</strong></td>
<td><strong>NIOSH REL (TWA) (mg/m³)</strong></td>
<td>10 mg/m³ (total dust)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 mg/m³ (respirable dust)</td>
</tr>
<tr>
<td><strong>Alberta</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (Calcium sulphate)</td>
<td></td>
</tr>
<tr>
<td><strong>British Columbia</strong></td>
<td><strong>OEL STEL (mg/m³)</strong></td>
<td>20 mg/m³ (total)</td>
<td></td>
</tr>
<tr>
<td><strong>British Columbia</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (total)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td><strong>Manitoba</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable particulate matter (Calcium sulfate))</td>
<td></td>
</tr>
<tr>
<td><strong>Newfoundland &amp; Labrador</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable particulate matter (Calcium sulfate))</td>
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</tr>
<tr>
<td><strong>Nova Scotia</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable particulate matter (Calcium sulfate))</td>
<td></td>
</tr>
<tr>
<td><strong>Ontario</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable (Calcium sulfate))</td>
<td></td>
</tr>
<tr>
<td><strong>Prince Edward Island</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³ (inhalable particulate matter (Calcium sulfate))</td>
<td></td>
</tr>
<tr>
<td><strong>Québec</strong></td>
<td><strong>VEMP (mg/m³)</strong></td>
<td>10 mg/m³ (containing no Asbestos and &lt;1% Crystalline silica-total dust)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 mg/m³ (containing no Asbestos and &lt;1% Crystalline silica-respirable dust)</td>
</tr>
<tr>
<td><strong>Saskatchewan</strong></td>
<td><strong>OEL STEL (mg/m³)</strong></td>
<td>20 mg/m³</td>
<td></td>
</tr>
<tr>
<td><strong>Saskatchewan</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td><strong>Yukon</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>30 mppcf</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 mg/m³</td>
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</tbody>
</table>

**Silica, amorphous, precipitated and gel (112926-00-8)**

<table>
<thead>
<tr>
<th>Location</th>
<th>Regulation Type</th>
<th>Standard</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>British Columbia</strong></td>
<td><strong>OEL TWA (mg/m³)</strong></td>
<td>4 mg/m³ (total)</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.5 mg/m³ (respirable)</td>
</tr>
</tbody>
</table>
## PERMACOLOR® Grout

**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).

<table>
<thead>
<tr>
<th>Location</th>
<th>OEL STEL (mg/m³)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Brunswick</td>
<td></td>
<td>10 mg/m³ (Silica - amorphous, precipitated silica and silica gel)</td>
</tr>
<tr>
<td>Nunavut</td>
<td></td>
<td>20 mg/m³ (Silica amorphous)</td>
</tr>
<tr>
<td>Nunavut</td>
<td></td>
<td>10 mg/m³ (Silica amorphous)</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td></td>
<td>20 mg/m³ (Silica amorphous)</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td></td>
<td>10 mg/m³ (Silica amorphous)</td>
</tr>
<tr>
<td>Québec</td>
<td></td>
<td>VEMP (mg/m³) 6 mg/m³ (containing no Asbestos and &lt;1% Crystalline silica-respirable dust)</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td></td>
<td>20 mg/m³ (Silica amorphous)</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td></td>
<td>10 mg/m³ (Silica amorphous)</td>
</tr>
<tr>
<td>Carbonic acid, calcium salt (1:1) (471-34-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA NIOSH</td>
<td></td>
<td>NIOSH REL (TWA) (mg/m³) 10 mg/m³ (total dust) 5 mg/m³ (respirable dust)</td>
</tr>
<tr>
<td>Alberta</td>
<td></td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Nunavut</td>
<td></td>
<td>20 mg/m³ (Limestone)</td>
</tr>
<tr>
<td>Nunavut</td>
<td></td>
<td>10 mg/m³ (Limestone)</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td></td>
<td>20 mg/m³ (Limestone)</td>
</tr>
<tr>
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<td></td>
<td>10 mg/m³ (Limestone)</td>
</tr>
<tr>
<td>Québec</td>
<td></td>
<td>VEMP (mg/m³) 10 mg/m³ (total dust)</td>
</tr>
<tr>
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<td>20 mg/m³ (Limestone)</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td></td>
<td>10 mg/m³ (Limestone)</td>
</tr>
<tr>
<td>Yukon</td>
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<td>20 mg/m³</td>
</tr>
<tr>
<td>Yukon</td>
<td></td>
<td>30 mppcf 10 mg/m³</td>
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<tr>
<td>Particulates not otherwise classified (PNOC)</td>
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</tr>
<tr>
<td>USA ACGIH</td>
<td></td>
<td>ACGIH TWA (mg/m³) 3 mg/m³ Respirable fraction 10 mg/m³ Total Dust</td>
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<td>Alberta</td>
<td></td>
<td>10 mg/m³ (total) 3 mg/m³ respirable</td>
</tr>
<tr>
<td>British Columbia</td>
<td></td>
<td>10 mg/m³ (nuisance dust-total dust) 3 mg/m³ (nuisance dust-respirable fraction)</td>
</tr>
<tr>
<td>Manitoba</td>
<td></td>
<td>10 mg/m³ (inhalable particles, recommended) 3 mg/m³ (respirable particles, recommended)</td>
</tr>
<tr>
<td>New Brunswick</td>
<td></td>
<td>3 mg/m³ (particulate matter containing no Asbestos and &lt;1% Crystalline silica, respirable fraction) 10 mg/m³ (particulate matter containing no Asbestos and &lt;1% Crystalline silica, inhalable fraction)</td>
</tr>
<tr>
<td>Newfoundland &amp; Labrador</td>
<td></td>
<td>10 mg/m³ (inhalable particles, recommended) 3 mg/m³ (respirable particles, recommended)</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td></td>
<td>10 mg/m³ (inhalable particles, recommended) 3 mg/m³ (respirable particles, recommended)</td>
</tr>
<tr>
<td>Nunavut</td>
<td></td>
<td>20 mg/m³ (insoluble or poorly soluble-inhalable fraction) 6 mg/m³ (insoluble or poorly soluble-respirable fraction)</td>
</tr>
<tr>
<td>Nunavut</td>
<td></td>
<td>10 mg/m³ (insoluble or poorly soluble-inhalable fraction) 3 mg/m³ (insoluble or poorly soluble-respirable fraction)</td>
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<tr>
<td>Northwest Territories</td>
<td></td>
<td>20 mg/m³ (insoluble or poorly soluble-inhalable fraction) 6 mg/m³ (insoluble or poorly soluble-respirable fraction)</td>
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<td>Northwest Territories</td>
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<td>10 mg/m³ (insoluble or poorly soluble-inhalable fraction) 3 mg/m³ (insoluble or poorly soluble-respirable fraction)</td>
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### Methacrylic acid (79-41-4)

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<thead>
<tr>
<th>Region</th>
<th>Standard</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td>ACGIH TWA (ppm)</td>
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</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (TWA) (mg/m³)</td>
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</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (TWA) (ppm)</td>
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<tr>
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<td>OEL TWA (mg/m³)</td>
<td>70 mg/m³</td>
</tr>
<tr>
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<td>OEL TWA (ppm)</td>
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</tr>
<tr>
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<td>OEL TWA (ppm)</td>
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</tr>
<tr>
<td>Manitoba</td>
<td>OEL TWA (ppm)</td>
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<tr>
<td>New Brunswick</td>
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<tr>
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</tr>
<tr>
<td>Nova Scotia</td>
<td>OEL TWA (ppm)</td>
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<tr>
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### Cellulose (9004-34-6)

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<th>Region</th>
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<th>Value</th>
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<td>ACGIH TWA (mg/m³)</td>
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<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>15 mg/m³ (total dust)</td>
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<tr>
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<td>NIOSH REL (TWA) (mg/m³)</td>
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<tr>
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<td>OEL TWA (mg/m³)</td>
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<tr>
<td></td>
<td></td>
<td>3 mg/m³ (respirable fraction)</td>
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<tr>
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</tr>
<tr>
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<td>OEL TWA (mg/m³)</td>
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<td>Newfoundland &amp; Labrador</td>
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<td>OEL TWA (mg/m³)</td>
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<tr>
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<td>OEL STEL (mg/m³)</td>
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</tr>
<tr>
<td>Nunavut</td>
<td>OEL TWA (mg/m³)</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Northwest Territories</td>
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<tr>
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<td>10 mg/m³</td>
</tr>
<tr>
<td>Ontario</td>
<td>OEL TWA (mg/m³)</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>OEL TWA (mg/m³)</td>
<td>10 mg/m³</td>
</tr>
<tr>
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<td>Material</td>
<td>OEL STEL (mg/m³)</td>
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<tr>
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<tr>
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<td>20 mg/m³</td>
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<tr>
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<td>OEL TWA (mg/m³)</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Yukon</td>
<td>OEL STEL (mg/m³)</td>
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</tr>
<tr>
<td>Yukon</td>
<td>OEL TWA (mg/m³)</td>
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**Plaster of Paris (26499-65-0)**

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<tr>
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<th>OEL TWA (mg/m³)</th>
</tr>
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<tbody>
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<td>10 mg/m³</td>
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</tr>
<tr>
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<td>20 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>OEL TWA (mg/m³)</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Yukon</td>
<td>OEL STEL (mg/m³)</td>
<td>20 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Yukon</td>
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**Calcium sulfate hemihydrate (10034-76-1)**

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<th>OEL TWA (mg/m³)</th>
</tr>
</thead>
<tbody>
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<td>Manitoba</td>
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<td></td>
</tr>
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<td>Newfoundland &amp; Labrador</td>
<td>OEL TWA (mg/m³)</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>OEL TWA (mg/m³)</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Ontario</td>
<td>OEL TWA (mg/m³)</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
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**Kaolin (1332-58-7)**

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</tr>
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<td>Manitoba</td>
<td>OEL TWA (mg/m³)</td>
<td>2 mg/m³</td>
<td></td>
</tr>
<tr>
<td>New Brunswick</td>
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<tr>
<td>Newfoundland &amp; Labrador</td>
<td>OEL TWA (mg/m³)</td>
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</tr>
<tr>
<td>Province</td>
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<td>Description</td>
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<tr>
<td>-----------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>Nova Scotia</td>
<td>2 mg/m³ (particulate matter containing no Asbestos and &lt;1% Crystalline silica, respirable particulate matter)</td>
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<tr>
<td>Nunavut</td>
<td>2 mg/m³ (respirable fraction)</td>
<td></td>
<td></td>
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<tr>
<td>Northwest Territories</td>
<td>2 mg/m³ (respirable fraction)</td>
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<tr>
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<td>Ontario</td>
<td>2 mg/m³ (containing no Asbestos and &lt;1% Crystalline silica)</td>
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<td>Prince Edward Island</td>
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<td>5 mg/m³ (containing no Asbestos and &lt;1% Crystalline silica-respirable dust)</td>
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<td></td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>4 mg/m³ (respirable fraction)</td>
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</tr>
<tr>
<td>Saskatchewan</td>
<td>2 mg/m³ (respirable fraction)</td>
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<td></td>
</tr>
<tr>
<td>Yukon</td>
<td>20 mg/m³</td>
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<td></td>
</tr>
<tr>
<td>Yukon</td>
<td>30 mppcf</td>
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<td></td>
</tr>
<tr>
<td>Iron oxide (Fe2O3) (1309-37-1)</td>
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<td></td>
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<td>OEL TWA (mg/m³)</td>
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<td>10 mg/m³ (dust and fume)</td>
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<td>Northwest Territories</td>
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### Québec

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### Saskatchewan

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<td>20 mg/m³ (regulated under Rouge)</td>
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<tr>
<td>OEL TWA (mg/m³)</td>
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<td>10 mg/m³ (regulated under Rouge)</td>
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### Yukon

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<tr>
<td></td>
<td>20 mg/m³ (regulated under Rouge)</td>
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<tr>
<td>OEL TWA (mg/m³)</td>
<td>5 mg/m³ (fume)</td>
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<tr>
<td></td>
<td>30 mppcf (regulated under Rouge)</td>
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### Calcium sulfate (7778-18-9)

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<td>OSHA PEL (TWA) (mg/m³)</td>
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<td></td>
<td></td>
<td>5 mg/m³ (respirable fraction)</td>
</tr>
<tr>
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<td>NIOSH REL (TWA) (mg/m³)</td>
<td>10 mg/m³ (total dust)</td>
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<tr>
<td></td>
<td></td>
<td>5 mg/m³ (respirable dust)</td>
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<tr>
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<td>10 mg/m³ (inhalable particulate matter)</td>
</tr>
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<td>10 mg/m³ (Gypsum)</td>
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<td>10 mg/m³ (Plaster of Paris)</td>
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<td>10 mg/m³ (Plaster of Paris)</td>
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<td>Québec</td>
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<td>5 mg/m³ (containing no Asbestos and &lt;1% Crystalline silica-respirable dust)</td>
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<tr>
<td>Saskatchewan</td>
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<td>20 mg/m³ (Gypsum and Plaster of Paris)</td>
</tr>
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<td>Saskatchewan</td>
<td>OEL TWA (mg/m³)</td>
<td>10 mg/m³ (Gypsum and Plaster of Paris)</td>
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### Tremolite (14567-73-8)

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</tr>
</thead>
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</tr>
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<td>VEMP (mg/m³)</td>
<td>1 fibers/cm³ (respirable (Asbestos))</td>
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</table>

### 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.

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

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<td>Flash Point</td>
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<tr>
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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Quartz (silica) will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride. 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). Portland Cement reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete. Iron oxide present in this product may become unstable at temperatures above 120°F (49°C) and slowly auto-oxide to Fe₂O₃ to release additional heat which could be sufficient to cause combustible materials to ignite. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

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: Reactive or incompatible with the following materials: oxidizing materials, acids, aluminum and ammonium salt. Portland cement is highly alkaline and will react with acids to produce a violent, heat-generating reaction. Toxic gases or vapors may be given off depending on the acid involved. Reacts with acids, aluminum metals and ammonium salts. Aluminum powder and other alkali and alkaline earth elements will react in wet mortar or concrete, liberating hydrogen gas.
Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts, and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosions. Silicates dissolve readily in hydrofluoric acid producing a corrosive gas — silicon tetrafluoride. Strong acids, strong bases, strong oxidizers.


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: Not classified

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: The three types of silicosis include: 1) Simple chronic silicosis – which results from long-term exposure (more than 20 years) to low amounts of respirable crystalline silica. Nodules of chronic inflammation and scarring provoked by the respirable crystalline silica form in the lungs and chest lymph nodes. This disease may feature breathlessness and may resemble chronic obstructive pulmonary disease (COPD); 2) Accelerated silicosis – occurs after exposure to larger amounts of respirable crystalline silica over a shorter period of time (5-15 years); 3) Acute silicosis – results from short-term exposure to very large amounts of respirable crystalline silica. The lungs become very inflamed and may fill with fluid, causing severe shortness of breath and low blood oxygen levels. Inflammation, scarring, and symptoms progress faster in accelerated silicosis than in simple silicosis. Progressive massive fibrosis may occur in simple or accelerated silicosis, but is more common in the accelerated form. Progressive massive fibrosis results from severe scarring and leads to the destruction of normal lung structures. Irritation of the respiratory tract and the other mucous membranes. May be corrosive to the respiratory tract.

Symptoms/Injuries After Skin Contact: Concrete may cause dry skin, discomfort, irritation, severe burns, and dermatitis. Exposure of sufficient duration to wet concrete 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. Unhardened concrete 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 concrete including alkalinity and abrasion. Allergic contact dermatitis is caused by sensitization to hexavalent chromium (chromate) present in concrete. The reaction can range from a mild rash to severe skin ulcers. Persons already sensitized may react to the first contact with wet concrete. Others may develop allergic dermatitis after years of repeated contact with wet concrete.

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: Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation). Some studies show that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis may be associated with the increased incidence of several autoimmune disorders such as scleroderma (thickening of the skin), systemic lupus erythematosus, rheumatoid arthritis and diseases affecting the kidneys. Silicosis increases the risk of tuberculosis. Some studies show an increased incidence of chronic kidney disease and end-stage renal disease in workers exposed to respirable crystalline silica. May cause cancer by inhalation.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50 Oral Rat</th>
<th>LC50 Dermal Rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium oxide (1305-78-8)</td>
<td>&gt; 2000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td>&gt; 2500 mg/kg</td>
</tr>
</tbody>
</table>

12/03/2019 EN (English US) 15/21
### PERMACOLOR® Grout 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).

<table>
<thead>
<tr>
<th>Substance Description</th>
<th>Toxicity Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz (14808-60-7)</td>
<td></td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50 Dermal Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>Magnesium oxide (MgO) (1309-48-4)</td>
<td>3870 mg/kg</td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
<td>3870 mg/kg</td>
</tr>
<tr>
<td>Citric acid (77-92-9)</td>
<td></td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
<td>5400 mg/kg</td>
</tr>
<tr>
<td>LD50 Dermal Rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Carbonic acid, calcium salt (1:1) (471-34-1)</td>
<td>6450 mg/kg</td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
<td>6450 mg/kg</td>
</tr>
<tr>
<td>Methacrylic acid (79-41-4)</td>
<td></td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
<td>1060 mg/kg</td>
</tr>
<tr>
<td>LD50 Dermal Rabbit</td>
<td>500 - 1000 mg/kg</td>
</tr>
<tr>
<td>LC50 Inhalation Rat</td>
<td>7.1 mg/l/4h</td>
</tr>
<tr>
<td>ATE US/CA (gas)</td>
<td>4,500.00 ppmV/4h</td>
</tr>
<tr>
<td>ATE US/CA (dust, mist)</td>
<td>1.50 mg/l/4h</td>
</tr>
<tr>
<td>Cellulose (9004-34-6)</td>
<td></td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50 Dermal Rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LC50 Inhalation Rat</td>
<td>&gt; 5800 mg/m³ (Exposure time: 4 h)</td>
</tr>
<tr>
<td>Kaolin (1332-58-7)</td>
<td></td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50 Dermal Rabbit</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50 Dermal Rabbit</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>Iron oxide (Fe2O3) (1309-37-1)</td>
<td></td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
<td>&gt; 10000 mg/kg</td>
</tr>
<tr>
<td>Iron oxide (Fe3O4) (1317-61-9)</td>
<td></td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
<td>&gt; 10000 mg/kg</td>
</tr>
<tr>
<td>Calcium sulfate (7778-18-9)</td>
<td></td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
<td>&gt; 3000 mg/kg</td>
</tr>
</tbody>
</table>

**SECTION 12: ECOLOGICAL INFORMATION**

12.1. **Toxicity**

Ecology - General: Not classified.
Calcium oxide (1305-78-8)
LC50 Fish 1 50.6 mg/l

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)

Silica, amorphous, precipitated and gel (112926-00-8)
LC50 Fish 1 10000 mg/l

Citric acid (77-92-9)
LC50 Fish 1 1516 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

Methacrylic acid (79-41-4)
LC50 Fish 1 85 mg/l (Exposure Time: 96 h - Species: Oncorhynchus mykiss)
ErC50 (algae) 14 mg/l
NOEC Chronic Crustacea 53 mg/l

Iron oxide (Fe2O3) (1309-37-1)
LC50 Fish 1 100000 mg/l (Exposure time: 96 h - Species: Danio rerio [static])

Iron oxide (Fe3O4) (1317-61-9)
LC50 Fish 1 >= 10000 mg/l (96h, Brachydanio rerio; OECD 203)

Calcium sulfate (7778-18-9)
LC50 Fish 1 2980 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
LC50 Fish 2 > 1970 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

12.2. Persistence and Degradability

PERMACOLOR® Grout
Persistence and Degradability Not established.

Citric acid (77-92-9)
Persistence and Degradability Readily biodegradable in water.

12.3. Bioaccumulative Potential

PERMACOLOR® Grout
Bioaccumulative Potential Not established.
Calcium oxide (1305-78-8)
BCF Fish 1 (no bioaccumulation)
Citric acid (77-92-9)
Log Pow -1.72 (at 20 °C)

Carbonic acid, calcium salt (1:1) (471-34-1)
BCF Fish 1 (no bioaccumulation)

Methacrylic acid (79-41-4)
Log Pow 0.93

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
PERMACOLOR® Grout
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).

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

<table>
<thead>
<tr>
<th>PERMACOLOR® Grout</th>
<th>SARA Section 311/312 Hazard Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health hazard - Specific target organ toxicity (single or repeated exposure)</td>
</tr>
<tr>
<td></td>
<td>Health hazard - Carcinogenicity</td>
</tr>
<tr>
<td></td>
<td>Health hazard - Respiratory or skin sensitization</td>
</tr>
<tr>
<td></td>
<td>Health hazard - Serious eye damage or eye irritation</td>
</tr>
<tr>
<td></td>
<td>Health hazard - Skin corrosion or Irritation</td>
</tr>
</tbody>
</table>

Cement, portland, chemicals (65997-15-1)
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

Quartz (14808-60-7)
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

Magnesium oxide (MgO) (1309-48-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Citric acid (77-92-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Carbonic acid, calcium salt (1:1) (471-34-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Methacrylic acid (79-41-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Cellulose (9004-34-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag
XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

Kaolin (1332-58-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Cement, alumina, chemicals (65997-16-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Iron oxide (Fe2O3) (1309-37-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Iron oxide (Fe3O4) (1317-61-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Calcium sulfate (7778-18-9)
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.

<table>
<thead>
<tr>
<th>Chemical Name (CAS No.)</th>
<th>Carcinogenicity</th>
<th>Developmental Toxicity</th>
<th>Female Reproductive Toxicity</th>
<th>Male Reproductive Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz (14808-60-7)</td>
<td>X</td>
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</tr>
<tr>
<td>Chromium, ion (Cr6+) (18540-29-9)</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Substance Description</td>
<td>U.S. - Massachusetts - Right To Know List</td>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List</td>
<td>U.S. - Pennsylvania - RTK (Right to Know) List</td>
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<tr>
<td>-----------------------</td>
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<td>----------------------------------------------------------</td>
<td>------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Cement, portland, chemicals (65997-15-1)</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Calcium oxide (1305-78-8)</td>
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<td></td>
</tr>
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<td>Magnesium oxide (MgO) (1309-48-4)</td>
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<td></td>
</tr>
<tr>
<td>Chromium, ion (Cr6+) (18540-29-9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium sulfate dihydrate (13397-24-5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silica, amorphous, precipitated and gel (112926-00-8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methacrylic acid (79-41-4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cellulose (9004-34-6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plaster of Paris (26499-65-0)</td>
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<td></td>
</tr>
<tr>
<td>Kaolin (1332-58-7)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Iron oxide (Fe2O3) (1309-37-1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium sulfate (7778-18-9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PERMACOLOR® Grout

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).

15.3. Canadian Regulations

<table>
<thead>
<tr>
<th>Chemical</th>
<th>List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement, portland, chemicals (65997-15-1)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Calcium oxide (1305-78-8)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Quartz (14808-60-7)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Limestone (1317-65-3)</td>
<td>Listed on the Canadian NDSL (Non-Domestic Substances List)</td>
</tr>
<tr>
<td>Magnesium oxide (MgO) (1309-48-4)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Calcium sulfate dihydrate (13397-24-5)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Silica, amorphous, precipitated and gel (112926-00-8)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Citric acid (77-92-9)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Carbonic acid, calcium salt (1:1) (471-34-1)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Methacrylic acid (79-41-4)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Cellulose (9004-34-6)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Kaolin (1332-58-7)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Cement, alumina, chemicals (65997-16-2)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
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<tr>
<td>Iron oxide (Fe2O3) (1309-37-1)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Iron oxide (Fe3O4) (1317-61-9)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Calcium sulfate (7778-18-9)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
</tbody>
</table>

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

Date of Preparation or Latest Revision: 12/03/2019

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:

<table>
<thead>
<tr>
<th>Acute Tox. 3 (Dermal)</th>
<th>Acute toxicity (dermal) Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4 (Inhalation)</td>
<td>Acute toxicity (inhalation) Category 4</td>
</tr>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral) Category 4</td>
</tr>
<tr>
<td>Aquatic Acute 1</td>
<td>Hazardous to the aquatic environment - Acute Hazard Category 1</td>
</tr>
<tr>
<td>Aquatic Acute 3</td>
<td>Hazardous to the aquatic environment - Acute Hazard Category 3</td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>Hazardous to the aquatic environment - Chronic Hazard Category 1</td>
</tr>
</tbody>
</table>
**Aquatic Chronic 3** | Hazardous to the aquatic environment - Chronic Hazard Category 3
---|---
**Carc. 1A** | Carcinogenicity Category 1A
**Carc. 1B** | Carcinogenicity Category 1B
**Comb. Dust** | Combustible Dust
**Eye Dam. 1** | Serious eye damage/eye irritation Category 1
**Eye Irrit. 2A** | Serious eye damage/eye irritation Category 2A
**Flam. Liq. 4** | Flammable liquids Category 4
**Skin Corr. 1A** | Skin corrosion/irritation Category 1A
**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
**H227** | Combustible liquid
**H302** | Harmful if swallowed
**H311** | Toxic in contact with skin
**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
**H332** | Harmful if inhaled
**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
**H412** | Harmful 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.*