

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Date of Issue: 10/23/2019

Version: 1.0

#### **SECTION 1: IDENTIFICATION**

#### 1.1. Product Identifier

#### Product Form: Mixture

**Product Name:** Superior Stucco Exterior Stucco, Superior Stucco Interior Finish, Superior Stucco Foam-Tite, Superior Stucco Uniwall, Superior Stucco Limestone, Superior Stucco Super Set, Superior Stucco Fat Mud, Superior Stucco Deck Mud, Superior Stucco Shower Finish, Superior Stucco Roof Mortar, Superior Stucco Fog Coat

Manufacturer

408-292-0454

SUPERIOR STUCCO

San Jose, CA 95110

1601 Little Orchard Street, Ste. E

#### **1.2.** Intended Use of the Product

Use of the Substance/Mixture: Building Materials, Construction.

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

**Company** Stucco Supply Co. 1601 Little ORchard St. Ste. E San Jose, CA 95110 408-292-0454 <u>StuccoSupplyCo.com</u>

1.4. Emergency Telephone Number

: 408-292-0454

#### **SECTION 2: HAZARDS IDENTIFICATION**

2.1. Cla	ssification of the Substance or Mixture
Skin Corr. 1	LC H314
Eye Dam. 1	. H318
Skin Sens.	1 H317
Carc. 1A	H350
STOT SE 3	H335
STOT RE 1	H372
Full text of h	azard classes and H-statements · see Section

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

#### 2.2. Label Elements

**Emergency Number** 

#### GHS-US Labeling

Hazard Pictograms (GHS-US)

	GHS05 GHS07 GHS08
Signal Word (GHS-US)	GHS05 GHS07 GHS08
Hazard Statements (GHS-US)	<ul> <li>H314 - Causes severe skin burns and eye damage.</li> <li>H317 - May cause an allergic skin reaction.</li> <li>H318 - Causes serious eye damage.</li> <li>H335 - May cause respiratory irritation.</li> <li>H350 - May cause cancer (Inhalation).</li> <li>H372 - Causes damage to organs (lungs) through prolonged or repeated exposure</li> </ul>
Precautionary Statements (GHS-US)	<ul> <li>(Inhalation).</li> <li>P201 - Obtain special instructions before use.</li> <li>P202 - Do not handle until all safety precautions have been read and understood.</li> <li>P260 - Do not breathe dust.</li> <li>P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> </ul>
10/23/2019	EN (English US) 1/1

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P271 - Use only outdoors or in a well-ventilated area. P272 - Contaminated work clothing must 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/shower. P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position 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. 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. P363 - Wash contaminated clothing 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, and international regulations. P308+310+313 - If exposed or concerned: Get medical advice/attention. Immediately call a poison center or doctor.

#### 2.3. Other Hazards

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

#### 2.4. Unknown Acute Toxicity (GHS-US)

#### No data available

#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substance

#### Not applicable

#### 3.2. Mixture

Name	Synonyms	Product Identifier	%	GHS US classification
Quartz	Quartz (SiO2) / Silica, crystalline, quartz / Crystalline silica, quartz / .alphaQuartz / Silica, crystalline, .alphaquartz / QUARTZ / Crystalline silica in the form of quartz / Quartz, silica / Quartz (respirable fraction) / Silica dust / Silica, crystalline- .alpha.quartz / Silica, .alpha quartz / Silicon dioxide / Silica, quartz / Silica, crystalline	(CAS-No.) 14808-60-7	40 - 75	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372
Cement, Portland, chemicals	Portland cement / Silicate, Portland cement / Cement (Portland) / Cement kiln dust / Cement Portland	(CAS-No.) 65997-15-1	15 - 40	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H335
Calcium hydroxide	Calcium dihydroxide / Calcium hydroxide (Ca(OH)2) / Hydrated lime / Lime, hydrated / CALCIUM HYDROXIDE / Slaked lime	(CAS-No.) 1305-62-0	10 - 20	Skin Corr. 1C, H314 Eye Dam. 1, H318 STOT SE 3, H335
Bentonite	Bentolite / Bentonite (A colloidal clay. Consists primarily of montmorillonite.) / BENTONITE / Sodium alumosilicate hydroxide / Sodium bentonite	(CAS-No.) 1302-78-9	<= 5	Not classified

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Kaolin	CI 77004 / KAOLIN / KaC751:D756	(CAS-No.) 1332-58-7	<= 5	Not classified
Full text of H-phrases: see Section 16.				

#### SECTION 4: FIRST AID MEASURES

#### 4.1. Description of First-aid Measures

**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).

**First-aid Measures After Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Immediately flush skin with plenty of water for at least 30 minutes. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

#### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

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

**Symptoms/Injuries After Inhalation:** Irritation of the respiratory tract and the other mucous membranes. May be corrosive to the respiratory tract. 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 results from severe scarring and leads to the destruction of normal lung structures. 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 disease 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.

**Symptoms/Injuries After Skin Contact:** 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:** Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of dry powder or with wet cement 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. Cement should not be eaten under any circumstances.

**Chronic Symptoms:** May cause cancer (Inhalation). Causes damage to organs (lungs) through prolonged or repeated exposure (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.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 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:** 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:** Silicon oxides. Quartz (silica) will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride.

#### **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. A key to using the product safely requires the user to recognize that Portland cement reacts chemically with water to produce calcium hydroxide which can cause severe chemical burns. Every attempt should be made to avoid skin and eye contact with cement. Do not get Portland cement inside boots, shoes or gloves. Do not allow wet, saturated clothing to remain against the skin. Promptly remove clothing and shoes that are dusty or wet with cement mixtures. Launder/clean clothing and shoes before reuse. Do not enter a confined space that stores or contains Portland cement unless appropriate procedures and protection are available. Portland cement can build up or adhere to the walls of a confined space and then release or fall suddenly (engulfment).

**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. Do not get in eyes, on skin, or on clothing. Handle empty containers with care because they may still present a hazard. Do not breathe dust. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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 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. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride. Portland Cement reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete.

#### 7.3. Specific End Use(s)

Building Materials, Construction.

#### 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), or OSHA (PEL).

Calcium hydroxide (1305-62-0)				
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>		
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>		
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m <sup>3</sup> (total dust)		
		5 mg/m <sup>3</sup> (respirable fraction)		
Quartz (1480	8-60-7)			
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable particulate matter)		
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen		
<b>USA NIOSH</b>	NIOSH REL (TWA) (mg/m³)	0.05 mg/m <sup>3</sup> (respirable dust)		
USA IDLH	US IDLH (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup> (respirable dust)		
USA OSHA	OSHA PEL (TWA) (mg/m³)	50 μg/m <sup>3</sup> (Respirable crystalline silica)		
Kaolin (1332-	58-7)			
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (particulate matter containing no asbestos and <1%		
		crystalline silica, respirable particulate matter)		
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen		
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m <sup>3</sup> (total dust)		
		5 mg/m <sup>3</sup> (respirable dust)		
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m <sup>3</sup> (total dust)		
		5 mg/m <sup>3</sup> (respirable fraction)		
Cement, Port	land, chemicals (65997-15-1)			
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m <sup>3</sup> (particulate matter containing no asbestos and <1%		
		crystalline silica, respirable particulate matter)		
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen		
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m <sup>3</sup> (total dust)		
		5 mg/m <sup>3</sup> (respirable dust)		
USA IDLH	US IDLH (mg/m <sup>3</sup> )	5000 mg/m <sup>3</sup>		
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust)		
		5 mg/m <sup>3</sup> (respirable fraction)		

Safety Data Sheet

Other Information

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 8.2. Exposure Controls

- Personal Protective Equipment
- Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.
   Gloves. Protective clothing. Protective goggles. Face shield. Insufficient ventilation:
  - wear respiratory protection.
- Materials for Protective Clothing Hand Protection Eye and Face Protection Skin and Body Protection Respiratory Protection
- : Chemically resistant materials and fabrics. Corrosion-proof clothing.
  - : Wear protective gloves.
  - : Chemical safety goggles and face shield.
  - : Wear suitable protective clothing.
  - : 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.
  - : 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	: Gray, White, or Tan Sanded Powder		
Odor	: No Distinct Odor		
Odor Threshold	: No data available		
рН	: 12; When Mixed With Water		
Evaporation Rate	: No data available		
Melting Point	: No data available		
Freezing Point	: No data available		
Boiling Point	: No data available		
Flash Point	: No data available		
Auto-ignition Temperature	: No data available		
Decomposition Temperature	: No data available		
Flammability (solid, gas)	: No data available		
Vapor Pressure	: No data available		
Relative Vapor Density at 20°C	: No data available		
Relative Density	: No data available		
Specific Gravity	: 2.7		
Solubility	: Water: Dilutable - Dispersible		
Partition Coefficient: N-Octanol/Water	: No data available		
Viscosity	: No data available		
9.2. Other Information	<b>J.2.</b> Other Information		

No additional information available

#### SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity:** 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: Incompatible materials.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**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 yielding possible fire and/or explosions. Silicates dissolve readily in hydrofluoric acid producing a corrosive gas — silicon tetrafluoride. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride. Portland Cement reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete.

**10.6.** Hazardous Decomposition Products: None expected under normal conditions of use.

#### SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects Acute Toxicity (Oral): Not classified Acute Toxicity (Dermal): Not classified Acute Toxicity (Inhalation): Not classified

Calcium hydroxide (1305-62-0)

Icium hydroxide (1305-62-0)		
LD50 Oral Rat	7340 mg/kg	
Quartz (14808-60-7)		
LD50 Oral Rat	> 5000 mg/kg	
LD50 Dermal Rat	> 5000 mg/kg	
Kaolin (1332-58-7)		
LD50 Oral Rat	> 5000 mg/kg	
LD50 Dermal Rat	> 5000 mg/kg	
LD50 Dermal Rabbit	> 5000 mg/kg	
Bentonite (1302-78-9)		
LD50 Oral Rat	> 5000 mg/kg	

Skin Corrosion/Irritation: Causes severe skin burns and eye damage.

pH: 12 When Mixed With Water

Serious Eye Damage/Irritation: Causes serious eye damage.

pH: 12 When Mixed With Water

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: May cause cancer (Inhalation).

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.	

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

Aspiration Hazard: Not classified

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**Symptoms/Injuries After Inhalation:** Irritation of the respiratory tract and the other mucous membranes. May be corrosive to the respiratory tract. 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 results from severe scarring and leads to the destruction of normal lung structures. 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 disease 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.

**Symptoms/Injuries After Skin Contact:** 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:** Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of dry powder or with wet cement 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. Cement should not be eaten under any circumstances.

**Chronic Symptoms:** May cause cancer (Inhalation). Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

#### SECTION 12: ECOLOGICAL INFORMATION

	AMATION	
12.1. Toxicity		
Ecology - General	: Not classified. High pH (alkalinity) of product may be harmful to aquatic life.	
Bentonite (1302-78-9)		
LC50 Fish 1	19000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])	
12.2. Persistence and Degrad	ability	
Superior Stucco Exterior Stucco, Su	uperior Stucco Interior Finish, Superior Stucco Foam-Tite, Superior Stucco Uniwall, Superior	
Stucco Limestone, Superior Stucco	Super Set, Superior Stucco Fat Mud, Superior Stucco Deck Mud, Superior Stucco Shower	
Finish, Superior Stucco Roof Morta	ar, Superior Stucco Fog Coat	
Persistence and Degradability Not established.		
12.3. Bioaccumulative Potent	rial states and stat	
Superior Stucco Exterior Stucco, Su	uperior Stucco Interior Finish, Superior Stucco Foam-Tite, Superior Stucco Uniwall, Superior	
Stucco Limestone, Superior Stucco	Super Set, Superior Stucco Fat Mud, Superior Stucco Deck Mud, Superior Stucco Shower	
Finish, Superior Stucco Roof Morta	ar, Superior Stucco Fog Coat	
<b>Bioaccumulative Potential</b>	Not established.	
Calcium hydroxide (1305-62-0)		
BCF Fish 1 (no bioaccumulation)		

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 12.4. Mobility in Soil

No additional information 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, 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

#### SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

15.1. US rederal Regulations			
• • •	nterior Finish, Superior Stucco Foam-Tite, Superior Stucco Uniwall, Superior		
	erior Stucco Fat Mud, Superior Stucco Deck Mud, Superior Stucco Shower		
Finish, Superior Stucco Roof Mortar, Superior Stu	cco Fog Coat		
SARA Section 311/312 Hazard Classes	Health hazard - Skin corrosion or Irritation		
	Health hazard - Serious eye damage or eye irritation		
	Health hazard - Respiratory or skin sensitization		
	Health hazard - Carcinogenicity		
	Health hazard - Specific target organ toxicity (single or repeated		
	exposure)		
Calcium hydroxide (1305-62-0)			
Listed on the United States TSCA (Toxic Substances	s Control Act) inventory		
Quartz (14808-60-7)			
Listed on the United States TSCA (Toxic Substances	s Control Act) inventory		
Kaolin (1332-58-7)			
Listed on the United States TSCA (Toxic Substances	s Control Act) inventory		
Bentonite (1302-78-9)			
Listed on the United States TSCA (Toxic Substance	s Control Act) inventory		
Cement, Portland, chemicals (65997-15-1)			
Listed on the United States TSCA (Toxic Substance	s Control Act) inventory		
L5.2. US State Regulations			
-			

#### Calcium hydroxide (1305-62-0)

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

#### Kaolin (1332-58-7)

#### Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### **California Proposition 65**

**WARNING:** This product can expose you to Quartz, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Quartz (14808-60-7)	Х			

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

Date of Preparation or Latest Revision Other Information : 10/23/2019

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

#### **GHS Full Text Phrases:**

Carc. 1A	Carcinogenicity Category 1A
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1C	Skin corrosion/irritation Category 1C
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
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H335	May cause respiratory irritation
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure

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.

SDS US (GHS HazCom)



Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Date of Issue: 10/23/2019

Version: 1.0

#### **SECTION 1: IDENTIFICATION**

#### 1.1. Product Identifier

Product Form: Mixture

**Product Name:** Superior Stucco Acrylic Finish, Superior Stucco Base Primer, Superior Stucco Multi-Bond, Superior Stucco Star Glue, Superior Stucco Ultra-Tite 60, Superior Stucco Acrylic Bonder, Superior Stucco Admix 2000, Superior Stucco PVA Bonder

Manufacturer

408-292-0454

SUPERIOR STUCCO

San Jose, CA 95110

1601 Little Orchard Street, Ste. E

#### 1.2. Intended Use of the Product

Use of the Substance/Mixture: Building Materials, Construction.

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

**Company** Stucco Supply Co. 1601 Little ORchard St. Ste. E San Jose, CA 95110 408-292-0454 StuccoSupplyCo.com

#### 1.4. Emergency Telephone Number

Emergency Number

: 408-292-0454

#### SECTION 2: HAZARDS IDENTIFICATION 2.1. Classification of the Substance or Mixture

Skin Irrit. 2	H315
Eye Dam. 1	H318
Skin Sens. 1	H317
Carc. 1A	H350
STOT RE 1	H372

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

#### 2.2. Label Elements

#### GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US) Hazard Statements (GHS-US)

Precautionary Statements (GHS-US)

H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H350 - May cause cancer (Inhalation).

H372- Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

- P260 Do not breathe vapors, mist, or spray. P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P280 Wear protective gloves, protective clothing, and eye protection.
- P302+P352 If on skin: Wash with plenty of water.

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.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

#### 2.3. Other Hazards

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

#### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Synonyms	Product Identifier	%	GHS US classification
Limestone	Chalk / Limestone (A noncombustible solid characteristic of sedimentary rock. It consists primarily of calcium carbonate.) / Natural calcium carbonate / Marble / Calcium carbonate / Limestone (sedimentary rock) / Calcite / Limestone ground / Acetate, 4- methyl-2-propyl-2H- tetrahydropyran-4-yl / Ground limestone	(CAS-No.) 1317-65-3	< 70	Not classified
Dolomite (CaMg(CO3)2)	Dolomite / Magnesium calcium carbonate / Calcium magnesium carbonate / DOLOMITE	(CAS-No.) 16389-88-1	< 65	Not classified
Acrylic polymers		(CAS-No.) 9065-11-6	10 - 35	Not classified
Quartz	Quartz (SiO2) / Silica, crystalline, quartz / Crystalline silica, quartz / .alphaQuartz / Silica, crystalline, .alphaquartz / QUARTZ / Crystalline silica in the form of quartz / Quartz, silica / Quartz (respirable fraction) / Silica dust / Silica, crystalline- .alpha.quartz / Silica, .alpha quartz / Silicon dioxide / Silica, quartz / Silica, crystalline	(CAS-No.) 14808-60-7	< 10	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372
1,2-Propanediol	1,2-Propylene glycol / 1,2- Dihydroxypropane / Propane- 1,2-diol / Propylene glycol / PROPYLENE GLYCOL	(CAS-No.) 57-55-6	< 1	Not classified
Titanium dioxide	C.I. 77891 / C.I. Pigment White 6 / Titanium oxide (TiO2) / CI 77891 / Titanium(IV) oxide / C.I. Pigment White 7 / Pigment White 6 / Titanium dioxide nanoparticles / TITANIUM DIOXIDE / Titanium oxide	(CAS-No.) 13463-67-7	<1	Carc. 2, H351
Water	AQUA / Aqua	(CAS-No.) 7732-18-5	< 0.97	Not classified

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Magnesium nitrate	Nitric acid, magnesium salt / Nitric acid, magnesium salt (2:1) / MAGNESIUM NITRATE / Magnesium dinitrate	(CAS-No.) 10377-60-3	< 0.02	Ox. Sol. 3, H272 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
3(2H)-Isothiazolone, 5- chloro-2-methyl-	5-Chloro-2-methyl-3- isothiazolone / 5-Chloro-2- methyl-2H-isothiazol-3-one / 5- Chloro-2-methyl-4-isothiazolin-3- one / Isothiazol(2H)-3-one, 5- chloro-2-methyl- / 4-Isothiazolin- 3-one, 5-chloro-2-methyl- / Methylchloroisothiazolinone / METHYLCHLOROISOTHIAZOLINO NE / 5-Chloro-2-methyl-3(2H)- isothiazolone / 2-Methyl-5- chloroisothiazolin-3-one / 5- Chloro-2-methyl-isothiazolone- 3(2H)-one / 2-Methyl-5-chloro- 2H-isothiazol-3-one / 3(2H)- Isothiazolon-3-one, 5-chloro-2- methyl- / CIT / 5-Chloro-2- methyl-isothiazolin-3(2H)-one / 5-Chloro-2-methyl-4-thiazoline- 3-ketone	(CAS-No.) 26172-55-4	< 0.014	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Magnesium chloride	Magnesium chloride (MgCl2) / MAGNESIUM CHLORIDE / Magnesium chloride, anhydrous / Magnesium dichloride / Magnesium chloride anhydrous	(CAS-No.) 7786-30-3	< 0.012	Not classified
3(2H)-Isothiazolone, 2- methyl-	2-Methyl-3-isothiazolone / 3- Isothiazolone, 2-methyl- / 2- Methyl-2H-isothiazol-3-one / 2- Methyl-4-isothiazolone-3-one / Methylisothiazolone / Methylisothiazolone / Methylisothiazolone / Methyl-4- isothiazolin-3-one, 2- / METHYLISOTHIAZOLINONE / MIT / 2-Methyl-2,3-dihydroisothiazol- 3-one / 2-Methylisothiazol- 3(2H)-one / 3(2H)-Isothiazolon- 3-one, 2-methyl- / 2- Methylisothiazolin-3(2H)-one	(CAS-No.) 2682-20-4	< 0.005	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Cupric nitrate	Nitric acid, copper(II) salt / Nitric acid, copper(2+) salt (2:1) / Nitric acid, copper(2+) salt / Copper(II) nitrate / Copper nitrate / Copper dinitrate	(CAS-No.) 3251-23-8	< 0.0017	Ox. Sol. 2, H272 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

Full text of H-phrases: see Section 16. SECTION 4: FIRST AID MEASURES

#### 4.1. Description of First-aid Measures

**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).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Obtain medical attention if irritation/rash develops or persists. Immediately drench affected area with water for at least 15 minutes.

**First-aid Measures After 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.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

#### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**Symptoms/Injuries:** Skin sensitization. Causes skin irritation. Causes serious eye damage. May cause cancer (Inhalation). Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

**Symptoms/Injuries After Inhalation:** For particulates or dust from further processing: 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. 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 endstage renal disease in workers exposed to respirable crystalline silica.

**Symptoms/Injuries After Skin Contact:** May cause an allergic skin reaction. Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

**Chronic Symptoms:** May cause cancer (Inhalation). Causes damage to organs (lungs) through prolonged or repeated exposure (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 (CO<sub>2</sub>), 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: Hazardous reactions will not occur under normal conditions.

#### 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, CO<sub>2</sub>). Nitrogen oxides. Silicon oxides.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

#### 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.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

#### 6.3. Methods and Materials for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. **Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

#### 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: Contains Crystalline Silica (quartz): As quartz is bound in a polymer matrix, it is not expected to be available as an airborne hazard under normal condition of use. If dust is released into the air, repeated exposure to respirable (airborne) crystalline silica dust may cause respiratory irritation, lung damage in the form of silicosis, and cancer. **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 breathing vapors, mist, spray. Do not get in eyes, on skin, or on clothing. **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.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

#### 7.3. Specific End Use(s)

Building Materials, Construcion.

#### 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), or OSHA (PEL).

Quartz (1480	8-60-7)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable particulate matter)	
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m <sup>3</sup> (respirable dust)	
USA IDLH	US IDLH (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup> (respirable dust)	
USA OSHA	OSHA PEL (TWA) (mg/m³)	50 μg/m <sup>3</sup> (Respirable crystalline silica)	
Limestone (1	317-65-3)		
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m <sup>3</sup> (total dust)	
		5 mg/m <sup>3</sup> (respirable dust)	
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m <sup>3</sup> (total dust)	
		5 mg/m <sup>3</sup> (respirable fraction)	
Titanium dio	xide (13463-67-7)		
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m <sup>3</sup>	
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen	
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	2.4 mg/m <sup>3</sup> (CIB 63-fine)	
		0.3 mg/m <sup>3</sup> (CIB 63-ultrafine, including engineered nanoscale)	
USA IDLH	US IDLH (mg/m <sup>3</sup> )	5000 mg/m <sup>3</sup>	
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m <sup>3</sup> (total dust)	
1,2-Propaneo	1,2-Propanediol (57-55-6)		
USA AIHA	WEEL TWA (mg/m³)	10 mg/m <sup>3</sup>	

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 8.2. Exposure Controls

Appropriate Engineering Controls       : Energency eve wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.         Personal Protective Equipment       : Gloves. Protective clothing. Protective goggles.         Materials for Protection       : Chemically resistant materials and fabrics.         Hand Protection       : Wear protective goggles.         Skin and Body Protection       : Wear protective goggles.         Skin and Body 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       : Liquid         Apperarance       : White, Off White, Pale Green Gray Viscous Liquid         Odor       : Faint Ammonia Smell         Odor Threshold       : No data available         pH       : > 8         Evaporation Rate       : No data available         Auto-ignition Temperature       : No data available         Presenge Point       : No data available	8.2. Exposure Controls	
Materials for Protective Clothing       : Chemically resistant materials and fabrics.         Hand Protection       : Wear protective gloves.         Eye and Face Protection       : Chemical safety goggles.         Sin and Body Protection       : Chemical safety goggles.         Sin and Body 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 on Basic Physical and Chemical Properties         Physical State       : Liquid         Appearance       : White, Off White, Pale Green Gray Viscous Liquid         Odor       : No data available         pH       : > 8         Evaporation Rate       : No data available         Melting Point       : > No data available         Melting Point       : No data available         Piresurg Composition Temperature       : No data available         Paremosition Temperature       : No data available         Retaitive Vapor Density at 20°C       : No data available         Pita Horint       : No data available         Pita Horint       : No data available         Retaitive Vapor Density at 20°C       : No data available         Relative Vapor Density at 20°C <td< th=""><th></th><th>immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.</th></td<>		immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.
Hand Protection: Wear protective gloves.Eye and Face Protection: Chemical safety goggles.Skin and Body Protection: Wear 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 PROPERTIES9.1. Information on Basic Physical and Chemical Properties Physical State: Liquid AppearanceAppearance: White, Off White, Pale Green Gray Viscous LiquidOdor: Faint Ammonia SmellOdor Threshold: No data availablepH: > 8Evaporation Rate: No data availableMeiting Point: No data availableBoiling Point: No data availableBoiling Point: No data availableAuto-ignition Temperature: No data availablePlanemability (solid, gas): No data availableVapor Pressure: No data availableRelative Vapor Density at 20°C: No data availableRelative Vapor Density at 20°C: No data availableSpecific Gravity: > 1Solubility: No data availablePartition Coefficient: N-Octanol/Water: No data availablePartition Coefficient: N-Octanol/Water: No data availablePartition Coefficient: N-Octanol/Water: No data availablePartition Coefficient: N-Octanol/Water </th <th></th> <th></th>		
Hand Protection: Wear protective gloves.Eye and Face Protection: Chemical safety goggles.Skin and Body Protection: Wear suitable protective clothing.Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection.Other Information: Wen using, do not eat, drink or smoke.SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES9.1. Information on Basic Physical and Chemical PropertiesPhysical State: LiquidAppearance: White, Off White, Pale Green Gray Viscous LiquidOdor: Faint Ammonia SmellOdor Threshold: No data availablepH: > 8Evaporation Rate: No data availableMelting Point: No data availableBoiling Point: No data availableBoiling Point: No data availablePlan Pressure: No data availableBoiling Point: No data availableFlash Point: No data availableAuto-ignition Temperature: No data availablePlative Vapor Density at 20°C: No data availableRelative Vapor Density at 20°C: No data availableRelative Vapor Density at 20°C: No data availableRelative Vapor Density at 20°C: No data availableSpecific Gravity: > 1Solubility: No data availablePartition Coefficient: N-Octanol/Water: No data availablePartition Coefficient: N-Octanol/Water: No data availablePartition Coefficient: N-Octanol/Water: No data availablePartitio	Materials for Protective Clothing	: Chemically resistant materials and fabrics.
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       : Liquid         Appearance       : White, Off White, Pale Green Gray Viscous Liquid         Odor       : Faint Ammonia Smell         Odor       : No data available         pH       : > 8         Evaporation Rate       : No data available         Melting Point       : No data available         Freezing Point       : No data available         Boiling Point       : No data available         Auto-ignition Temperature       : No data available         Flaamability (solid, gas)       : No data available         Relative Density at 20°C       : No data available         Relative Density       : No data available         Relative Density       : No data available         Relative Density       : No data available         Relative Densi	Hand Protection	: Wear protective gloves.
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       : Liquid         Appearance       : White, Off White, Pale Green Gray Viscous Liquid         Odor       : Faint Ammonia Smell         Odor Threshold       : No data available         pH       : > 8         Evaporation Rate       : No data available         Melting Point       : No data available         Freezing Point       : No data available         Pathon       : No data available         Preszing Point       : No data available         Pathon       : No data available         Pathonint       : No data available <th>Eye and Face Protection</th> <th>: Chemical safety goggles.</th>	Eye and Face Protection	: Chemical safety goggles.
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       : Liquid         Appearance       : White, Off White, Pale Green Gray Viscous Liquid         Odor       : Faint Ammonia Smell         Odor Threshold       : No data available         pH       :> 8         Evaporation Rate       : No data available         Freezing Point       :> No data available         Boiling Point       :> No data available         Auto-ignition Temperature       : No data available         Plammability (solid, gas)       : No data available         Vapor Pressure       : No data available         Planmability (solid, gas)       : No data available         Plative Vapor Density at 20°C       : No data available         Relative Density       : No data available         Specific Gravity       : > 1         Solubility       : No data available         Partition Coefficient: N-Octanol/Water       : No data available         Partition Coefficient: N-Octanol/Water	-	
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       : Liquid         Appearance       : White, Off White, Pale Green Gray Viscous Liquid         Odor       : Faint Ammonia Smell         Odor Threshold       : No data available         pH       : > 8         Evaporation Rate       : No data available         Melting Point       : No data available         Freezing Point       : No data available         Boiling Point       : > 100 °C (>212 °F)         Flash Point       : No data available         Auto-ignition Temperature       : No data available         Parmability (solid, gas)       : No data available         Vapor Pressure       : No data available         Relative Vapor Density at 20°C       : No data available         Relative Vapor Density at 20°C       : No data available         Relative Density       : No data available         Specific Gravity       : > 1         Solubility       : Vater: Dilutible         Partition Coefficient: N-Octanol/Water       : No data available         Partition Coefficient: N-Octanol/Water       : No data available	Respiratory Protection	protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES         9.1. Information on Basic Physical and Chemical Properties         Physical State       : Liquid         Appearance       : White, Off White, Pale Green Gray Viscous Liquid         Odor       : Faint Ammonia Smell         Odor Threshold       : No data available         pH       :> 8         Evaporation Rate       : No data available         Melting Point       : No data available         Freezing Point       : No data available         Boiling Point       : No data available         Gueroposition Temperature       : No data available         Decomposition Temperature       : No data available         Flash Point       : No data available         Plateitve Vapor Density at 20°C       : No data available         Relative Vapor Density at 20°C       : No data available         Relative Density       : > 1         Solubility       : > 1         Solubility       : > 1         Solubility       : > No data available         Partition Coefficient: N-Octanol/Water       : No data available		•
9.1. Information on Basic Physical and Chemical Properties         Physical State       : Liquid         Appearance       : White, Off White, Pale Green Gray Viscous Liquid         Odor       : Faint Ammonia Smell         Odor Threshold       : No data available         pH       :> 8         Evaporation Rate       : No data available         Melting Point       : No data available         Freezing Point       : No data available         Boiling Point       : No data available         Boiling Point       : No data available         Boiling Point       : No data available         Auto-ignition Temperature       : No data available         Plasmability (solid, gas)       : No data available         Vapor Pressure       : No data available         Relative Density       : No data available         Specific Gravity       :> 1         Solubility       :> 1         Solubility       : No data available         Partition Coefficient: N-Octanol/Water       : No data available         Viscosity       : No data available		
Physical State: LiquidAppearance: White, Off White, Pale Green Gray Viscous LiquidOdor: Faint Ammonia SmellOdor Threshold: No data availablepH: > 8Evaporation Rate: No data availableMelting Point: No data availableFreezing Point: No data availableBoiling Point: No data availableAuto-ignition Temperature: No data availablePlamability (solid, gas): No data availableVapor Pressure: No data availableRelative Vapor Density at 20°C: No data availableRelative Density: > 1Solubility: > 1Solubility: No data availablePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data available9.2. Other Information: No data available		
Appearance: White, Off White, Pale Green Gray Viscous LiquidOdor: Faint Ammonia SmellOdor Threshold: No data availablepH: > 8Evaporation Rate: No data availableMelting Point: No data availableFreezing Point: No data availableBoiling Point: No data availableBoiling Point: > 100 °C (>212 °F)Flash Point: No data availableAuto-ignition Temperature: No data availableDecomposition Temperature: No data availableFlamability (solid, gas): No data availableVapor Pressure: No data availableRelative Density at 20°C: No data availableRelative Density: No data availableSolubility: > 1Solubility: No data availablePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data availablePartition Coefficient: N-Octanol/Water: No data availableSolubility: No data availablePartition Coefficient: N-Octanol/Water: No data availableSolubility	-	•
Odor: Faint Ammonia SmellOdor Threshold: No data availablepH:> 8Evaporation Rate: No data availableMelting Point: No data availableFreezing Point: No data availableBoiling Point: > 100 °C (>212 °F)Flash Point: No data availableAuto-ignition Temperature: No data availableDecomposition Temperature: No data availablePlammability (solid, gas): No data availableRelative Vapor Density at 20°C: No data availableRelative Density: No data availableSpecific Gravity: > 1Solubility: Water: DilutiblePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data available9.2. Other Information: No data available	-	-
Odor Threshold:No data availablepH:> 8Evaporation Rate:No data availableMelting Point:No data availableFreezing Point:No data availableBoiling Point:No data availableBoint:No data availableAuto-ignition Temperature:No data availablePecomposition Temperature:No data availableFlash Point:No data availableRelative Vapor Pressure:No data availableRelative Vapor Density at 20°C:No data availableRelative Density:No data availableSpecific Gravity:> 1Solubility:Water: DilutiblePartition Coefficient: N-Octanol/Water:No data availableViscosity:No data available9.2. Other Information:		
pH: >8Evaporation Rate: No data availableMelting Point: No data availableFreezing Point: No data availableBoiling Point: >100 °C (>212 °F)Flash Point: No data availableAuto-ignition Temperature: No data availableDecomposition Temperature: No data availableFlammability (solid, gas): No tapplicableVapor Pressure: No data availableRelative Vapor Density at 20°C: No data availableSpecific Gravity: >1Solubility: Water: DilutiblePartition Coefficient: N-Octanol/Water: No data availableYaco Sity: No data available9.2. Other Information: Use Site Site Site Site Site Site Site Sit		
Evaporation Rate: No data availableMelting Point: No data availableFreezing Point: No data availableBoiling Point: > 100 °C (>212 °F)Flash Point: No data availableAuto-ignition Temperature: No data availableDecomposition Temperature: No data availableFlammability (solid, gas): Not applicableVapor Pressure: No data availableRelative Vapor Density at 20°C: No data availableRelative Density: No data availableSpecific Gravity: > 1Solubility: Water: DilutiblePartition Coefficient: N-Octanol/Water: No data available9.2. Other Information:		
Melting Point: No data availableFreezing Point: No data availableBoiling Point: > 100 °C (>212 °F)Flash Point: No data availableAuto-ignition Temperature: No data availableDecomposition Temperature: No data availableFlammability (solid, gas): No data availableVapor Pressure: No data availableRelative Vapor Density at 20°C: No data availableRelative Density: No data availableSpecific Gravity: No data availableSolubility: Vater: DilutiblePartition Coefficient: N-Octanol/Water: No data availableYacosity: No data available9.2. Other Information	-	: >8
Freezing Point: No data availableBoiling Point: > 100 °C (>212 °F)Flash Point: No data availableAuto-ignition Temperature: No data availableDecomposition Temperature: No data availableFlammability (solid, gas): No data availableFlammability (solid, gas): No data availableVapor Pressure: No data availableRelative Vapor Density at 20°C: No data availableRelative Density: No data availableSpecific Gravity: > 1Solubility: Water: DilutiblePartition Coefficient: N-Octanol/Water: No data availableYiscosity: No data available9.2. Other Information	-	: No data available
Boiling Point: > 100 °C (>212 °F)Flash Point: No data availableAuto-ignition Temperature: No data availableDecomposition Temperature: No data availableFlammability (solid, gas): Not applicableVapor Pressure: No data availableRelative Vapor Density at 20°C: No data availableRelative Density: No data availableSpecific Gravity: > 1Solubility: Water: DilutiblePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data available9.2.Other Information	Melting Point	: No data available
Flash Point: No data availableAuto-ignition Temperature: No data availableDecomposition Temperature: No data availableFlammability (solid, gas): No data availableFlammability (solid, gas): No data availableVapor Pressure: No data availableRelative Vapor Density at 20°C: No data availableRelative Density: No data availableSpecific Gravity: > 1Solubility: Water: DilutiblePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data available9.2.Other Information	Freezing Point	: No data available
Auto-ignition Temperature: No data availableDecomposition Temperature: No data availableFlammability (solid, gas): Not applicableVapor Pressure: No data availableRelative Vapor Density at 20°C: No data availableRelative Density: No data availableSpecific Gravity: > 1Solubility: Water: DilutiblePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data available9.2.Other Information	Boiling Point	: >100 °C (>212 °F)
Decomposition Temperature: No data availableFlammability (solid, gas): Not applicableVapor Pressure: No data availableRelative Vapor Density at 20°C: No data availableRelative Density: No data availableSpecific Gravity: No data availableSpecific Gravity: Vater: DilutiblePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data available9.2. Other Information	Flash Point	: No data available
Flammability (solid, gas): Not applicableVapor Pressure: No data availableRelative Vapor Density at 20°C: No data availableRelative Density: No data availableSpecific Gravity: No data availableSolubility: Vater: DilutiblePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data available9.2. Other Information	Auto-ignition Temperature	: No data available
Vapor Pressure: No data availableRelative Vapor Density at 20°C: No data availableRelative Density: No data availableSpecific Gravity: > 1Solubility: Water: DilutiblePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data available9.2. Other Information	Decomposition Temperature	: No data available
Relative Vapor Density at 20°C: No data availableRelative Density: No data availableSpecific Gravity: > 1Solubility: Water: DilutiblePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data available9.2. Other Information	Flammability (solid, gas)	: Not applicable
Relative Density: No data availableSpecific Gravity: > 1Solubility: Water: DilutiblePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data available9.2. Other Information	Vapor Pressure	: No data available
Specific Gravity: > 1Solubility: Water: DilutiblePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data available9.2. Other Information	Relative Vapor Density at 20°C	: No data available
Solubility: Water: DilutiblePartition Coefficient: N-Octanol/Water: No data availableViscosity: No data available9.2. Other Information	Relative Density	: No data available
Partition Coefficient: N-Octanol/Water: No data availableViscosity: No data available9.2. Other Information	Specific Gravity	: >1
Viscosity       : No data available         9.2.       Other Information	Solubility	: Water: Dilutible
9.2. Other Information	Partition Coefficient: N-Octanol/Water	: No data available
	Viscosity	: No data available
No additional information available	9.2. Other Information	
	No additional information available	

#### **SECTION 10: STABILITY AND REACTIVITY**

- 10.1. Reactivity: Hazardous reactions will not occur under normal conditions.
- 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 acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products: None expected under normal conditions of use.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 11: TOXICOLOGICAL INFORMATION	ON	
11.1. Information on Toxicological Effects		
Acute Toxicity (Oral): Not classified		
Acute Toxicity (Dermal): Not classified		
Acute Toxicity (Inhalation): Not classified		
Quartz (14808-60-7)		
LD50 Oral Rat	> 5000 mg/kg	
LD50 Dermal Rat	> 5000 mg/kg	
Titanium dioxide (13463-67-7)		
LD50 Oral Rat	> 10000 mg/kg	
1,2-Propanediol (57-55-6)		
LD50 Oral Rat	20 g/kg	
LD50 Dermal Rabbit	20800 mg/kg	
3(2H)-Isothiazolone, 5-chloro-2-methyl- (26172-	55-4)	
LD50 Oral Rat	481 mg/kg	
LC50 Inhalation Rat	1.23 mg/l/4h	
ATE (Oral)	100.00 mg/kg body weight	
ATE (Dermal)	300.00 mg/kg body weight	
3(2H)-Isothiazolone, 2-methyl- (2682-20-4)		
LD50 Oral Rat	120 mg/kg	
LD50 Dermal Rabbit	200 mg/kg	
LC50 Inhalation Rat	0.11 mg/l/4h	
Magnesium chloride (7786-30-3)		
LD50 Oral Rat	2800 mg/kg	
LD50 Dermal Rat	> 2000 mg/kg (No deaths)	
Magnesium nitrate (10377-60-3)		
LD50 Oral Rat	5440 mg/kg	
Cupric nitrate (3251-23-8)		
LD50 Oral Rat	> 2000 mg/kg	
LD50 Dermal Rat	> 5000 mg/kg	
Skin Corrosion/Irritation: Causes skin irritation.		

**pH:** > 8

Serious Eye Damage/Irritation: Causes serious eye damage.

**pH:** > 8

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified.

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.	
Titanium dioxide (13463-67-7)		
IARC group 2B		
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.	

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### Aspiration Hazard: Not classified

**Symptoms/Injuries After Inhalation:** For particulates or dust from further processing: Thee 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. 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 endstage renal disease in workers exposed to respirable crystalline silica.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction. Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

**Chronic Symptoms:** May cause cancer (Inhalation). Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

SECTION 12: ECOLOGICAL INFORMA	ΤΙΟΝ		
12.1. Toxicity			
Ecology - General	: Not classified. High pH (alkalinity) of product may be harmful to aquatic life.		
1,2-Propanediol (57-55-6)			
LC50 Fish 1	51600 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])		
EC50 Daphnia 1	10000 mg/l (Exposure time: 24 h - Species: Daphnia magna)		
LC50 Fish 2	41 - 47 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])		
EC50 Daphnia 2	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])		
3(2H)-Isothiazolone, 5-chloro-2-methyl- (	26172-55-4)		
LC50 Fish 1	1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])		
EC50 Daphnia 1	4.71 mg/l (Exposure time: 48 h - Species: Daphnia magna)		
EC50 Daphnia 2	0.12 (0.12 - 0.3) mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through])		
Magnesium chloride (7786-30-3)			
LC50 Fish 1	1970 - 3880 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])		
EC50 Daphnia 1	140 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])		
Cupric nitrate (3251-23-8)			
LC50 Fish 1	0.2 mg/l (Exposure time : 96 hours, Species : Oncorhynchus mykiss [flow-through])		
12.2. Persistence and Degradability			
Superior Stucco Acrylic Finish, Superior St	tucco Base Primer, Superior Stucco Multi-Bond, Superior Stucco Star Glue, Superior		
Stucco Ultra-Tite 60, Superior Stucco Acry	lic Bonder, Superior Stucco Admix 2000, Superior Stucco PVA Bonder		
Persistence and Degradability	Not established.		
12.3. Bioaccumulative Potential	· · ·		
Superior Stucco Acrylic Finish, Superior St	tucco Base Primer, Superior Stucco Multi-Bond, Superior Stucco Star Glue, Superior		
Stucco Ultra-Tite 60, Superior Stucco Acry	lic Bonder, Superior Stucco Admix 2000, Superior Stucco PVA Bonder/		
Bioaccumulative Potential Not established.			
1,2-Propanediol (57-55-6)			
BCF Fish 1 < 1			
og Pow -0.92			

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

	al Register / Vol. 77, No. 58 / Monday, March 26,	
3(2H)-Isot	hiazolone, 5-chloro-2-methyl- (26	172-55-4)
Log Pow		-0.71 - 0.75 (at 20 °C)
Dolomite	CaMg(CO3)2) (16389-88-1)	
BCF Fish 1		(no known bioaccumulation)
12.4. M	obility in Soil	
No addition	al information available	
12.5. O	ther Adverse Effects	
Other Info	rmation	: Avoid release to the environment.
SECTION 1	3: DISPOSAL CONSIDERATIO	NS
13.1. W	aste Treatment Methods	
Waste Dis	oosal Recommendations: Dispose	e of contents/container in accordance with local, regional, national, and internationa
regulations	5.	
		ain hazardous when empty. Continue to observe all precautions.
	Vaste Materials: Avoid release to	
	4: TRANSPORT INFORMATIC	
		e prepared in accordance with certain assumptions at the time the SDS was
	•	variables that may or may not have been known at the time the SDS was issued.
		egulated for transport
		egulated for transport
14.3. In	Accordance with IATA Not r	egulated for transport
SECTION 1	5: REGULATORY INFORMATI	ON
15.1. U	S Federal Regulations	
Superior S	tucco Acrylic Finish, Superior Stuc	co Base Primer, Superior Stucco Multi-Bond, Superior Stucco Star Glue, Superior
Stucco Ult	ra-Tite 60, Superior Stucco Acrylic	Bonder, Superior Stucco Admix 2000, Superior Stucco PVA Bonder
SARA Sect	ion 311/312 Hazard Classes	Health hazard - Respiratory or skin sensitization
		Health hazard - Skin corrosion or Irritation
		Health hazard - Serious eye damage or eye irritation
		Health hazard - Carcinogenicity
		Health hazard - Specific target organ toxicity (single or repeated
	200 (0 7)	exposure)
Quartz (14		tenene Control Act) inventory
	he United States TSCA (Toxic Subs	tances Control Act) Inventory
	(1317-65-3)	
	he United States TSCA (Toxic Subs	tances Control Act) Inventory
	lioxide (13463-67-7)	
	he United States TSCA (Toxic Subs	tances Control Act) Inventory
	nediol (57-55-6)	
	he United States TSCA (Toxic Subs	
	hiazolone, 5-chloro-2-methyl- (26	
	he United States TSCA (Toxic Subs	
EPA TSCA	Regulatory Flag	PMN - PMN - indicates a commenced PMN substance.
		SP - SP - indicates a substance that is identified in a proposed
2(21)		Significant New Uses Rule.
	hiazolone, 2-methyl- (2682-20-4)	tenene Cantral Arth inventory
	•	
EPA ISCA	Regulatory Flag	
	he United States TSCA (Toxic Subs Regulatory Flag	tances Control Act) inventory PMN - PMN - indicates a commenced PMN substance. SP - SP - indicates a substance that is identified in a proposed Significant New Uses Rule.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Dolomite (CaMg(CO3)2) (16389-88-1)		
Listed on the United States TSCA (Toxic Substances Con	ntrol Act) inventory	
Magnesium chloride (7786-30-3)		
Listed on the United States TSCA (Toxic Substances Con	trol Act) inventory	
Magnesium nitrate (10377-60-3)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Cupric nitrate (3251-23-8)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
CERCLA RQ 100 lb		
Water (7732-18-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		

#### 15.2. US State Regulations

#### 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

#### 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

#### Titanium dioxide (13463-67-7)

- 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

#### 1,2-Propanediol (57-55-6)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

#### Magnesium nitrate (10377-60-3)

- 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

#### Cupric nitrate (3251-23-8)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

#### **California Proposition 65**

**WARNING:** This product can expose you to Quartz, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Quartz (14808-60-7)	Х			
Titanium dioxide (13463-67-7)	Х			

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

Date of Preparation or Latest Revision	
Other Information	

: 10/23/2019

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Carc. 1A	Carcinogenicity Category 1A
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Ox. Sol. 2	Oxidizing solids Category 2
Ox. Sol. 3	Oxidizing solids Category 3
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1A	Skin sensitization, category 1A
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H272	May intensify fire; oxidizer
H301	Toxic 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
H330	Fatal if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H350	May cause cancer
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	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.

SDS US (GHS HazCom)

### \*\*\*Material Safety Data Sheet\*\*\*

1.Chemical Produc	t and Company Identification		
Material Supplier :	San Jose Stucco Supply & Drywall 1601 Little Orchard Street, Ste. E San Jose, CA 95110 Ph: (408) 292-0454 Fax: (408) 292-3872		
Product name:	FN3868B		
2. Composition/Info	ormation on Ingredients		
Componentes Dolo		C	60,100

<i>Components:</i> %	Polypropylene	CAS No.9003-07-0	Concentration:	60-100
	Modified Asphalt	CAS No. N/A	Concentration :	1-5%

#### 3. Hazards Identification

#### Emergency Overview

Non-Hazardous at Room Temperatures. Hazardous only when heated.

Negligible Odor.

*Eye:* As supplied: irritant as a foreign body.

Skin Contact: Wash exposed skin with soap and water.

Inhalation: Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract. Unlikely to be hazardous by inhalation because of the low vapor pressure of the material at ambient temperature.Ingestion: Low oral toxicity

#### 4. First Aid measures

Eye:	Flush eyes with plenty of water.
Skin Contact:	Wash skin with soap and water.
Inhalation:	Remove to fresh air. Get medical attention.
Ingestion:	Treat symptomatically and supportively. Get medical attention.

5. Firefighting Measures	
Autoignition:	>700°F
Extinguishing Media:	CO2; Dry Chemical

Special Firefighting Procedures:	No special procedures are required	
Fire & Explosion Hazards:	Non-Combustible	
Hazardous Combustion Products:	Carbon Monoxide, Carbon Dioxide, unknown	
	hydrocarbons	
Lower Explosion Limit (%):	Not applicable	
Upper Explosion Limit (%):	Not applicable	

#### 6. Accidental Release Measures

Spill and Leak Procedures:

Contain and remove by mechanical means.

#### 7. Handling and Storage

Storage Temperature:	(
Handling/Storage:	
Sensitivity to static electricity:	1
Sensitivity to mechanical impact:	1

0 - 100°F Store in a cool dry area. No No

### 8. Exposure Controls/Personal Protection

Ventilation Requirements:	Non required	
Eye Protection Requirements:	Safety glasses suggested.	
Glove requirement:	Gloves should be worn.	
Clothing Requirements:	Long sleeve shirts suggested.	
Change/Removal of Clothing:	Remove contaminated clothing and launder before	
Wash requirement:	reuse. Wash before eating, drinking, or using toilet facilities.	
<b>Respirator Requirements:</b>	No respirator protection is necessary while working with this material.	
Exposure Guidelines :	Polypropylene CAS# 9003-07-0 Limits : ACGIH TLV-TWA : 10 mg/m (total dust) (particulate NOC)	

#### 9. Physical and Chemical Properties

Pure Substance or Mixture:	Woven fabric with black Adhesive. Slight odor.
Physical Form:	Solid
Color:	White/Black
Odor:	Petroleum
Odor Threshold:	Not Available
PH as is:	Not Applicable
PH in 1% solution:	Not Applicable
<b>Oxidizing Properties:</b>	Not Applicable
Boiling Point:	N/A
Melting Point:	300 F
Freezing Point:	Not Applicable
Solubility in Water:	Insoluble

Partition Coefficient:	Not Applicable
Specific Gravity (water=1)	1.1
Evaporation Rate:	Nil
Vapor Pressure (mmHg):	N/A
Vapor Density (air=1):	Nil
Volatiles:	<1%
Volatile Organic Compounds:	Nil
Autoignition:	Not Applicable

10. Stability and Reactivity	
Stability:	Stable
Reactivity Hazard Class:	0=stable
Hazardous Decomposition Produc	<i>ts:</i> Carbon monoxide, Carbon dioxide,
*	unknown hydrocarbons.
11. Toxicological Information	
Route of Entry:	Skin Contact; Eye Contact; Inhalation
Chronic (Long Term) Effects of H	Exposure
Effects of Chronic Exposure: Target Organs:	Although this product has not been tested for chronic effects, it is judged as having a low order of toxicity based on component information. Use of good industrial hygiene practices is recommended. Eyes; Skin; Respiratory System
Carcinogen:	There is inadequate evidence that bitumen alone are carcinogenic to humans.
12. Ecological Information	
Potential to Bioaccumulate: Aquatic Toxicity:	Unknown None established
13. Disposal Considerations Waste Disposal Methods:	Disposal should be in accordance with local, state or national legislation.

**14. Transport Information** This section provided for general information only.

For non-bulk shipping only. For more complete Transportation Regulatory information, please refer to the shipping documents accompanying the shipment of this product.

#### DOT Classification: Not noted

The information provided herein may not include the impact of additional regulatory requirements (e.g. for materials meeting the definition of a hazardous waste under RCRA, hazardous substances under CERCLA, and /of marine pollutants under CWA or similar federal, state or local laws) or any associated exceptions or exemptions under regulations applicable to the transport of this material.

15. Regulatory Info	ormation		
USA			
TSCA:		All components	are on the TSCA inventory.
SARA/Title III	CAST	Number	Concentration (%)
Contains no substan	ces at or above	the reporting thres	hold under Section 313
16. Other Informat	ion		
NFPA Hazard Rating: -Health 1 Slight			
	- Fire	1 Slight	
	- Reactivity	0 Least	
MSDS Date:		January 15, 2006	5
For Information Contact:		San Jose Stucco Su	pply & Drywall
		1601 Little Orchard	Street, Ste. E
		San Jose, CA 95110	

Additional Information: The information given and the recommendations made herein apply to our product(s) alone and are not combined with other product(s). Such are based on our own research and on data from other reliable sources and are believed to be accurate. No guarantee of accuracy is made. It is the purchaser's responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes.

#### CALAVERAS CEMENT CO – PORTLAND CEMENT FOR CONCRETE AND MORTAR -- 5610-00N060940

Product ID: PORTLAND CEMENT FOR CONCRETE AND MORTAR MSDS Date:11/20/1989 FSC:5610 NIIN:00N060940 MSDS Number: BXXDD === Responsible Party === Company Name: CALAVERAS CEMENT CO Address:KERN COUNTY City:MONOLITH State:CA ZIP:92548 Country:US Info Phone Num: 415-256-8837 Emergency Phone Num:805-822-4445 Preparer's Name:C TRUSTY CAGE:00050 === Contractor Identification === Company Name: CALAVERAS CEMENT COMPANY Address: 7677 OAKPORT STREET, SUITE 400 Box:City:OAKLAND State:CA ZIP:94621 Phone: (916) 275-1581 (STAN CRAMER) CAGE:00050 Ingred Name:TRICALCIUM SILICATE; (3CAO-SIO\*2) CAS:12168-85-3 OSHA PEL:N/K ACGIH TLV:N/K Ingred Name:DICALCIUM SILICATE; (2CAO.SIO2) CAS:10034-77-2 OSHA PEL:N/K ACGIH TLV:N/K Ingred Name:TRICALCIUM ALUMINATE; (3CAO.AL2O3) CAS:12042-78-3 OSHA PEL:N/K ACGIH TLV:N/K Ingred Name:TETRACALCIUM ALUMINOFERRATE; (4CAO.AL203.FE203) CAS:12068-35-8 OSHA PEL:N/K ACGIH TLV:N/K Ingred Name:GYPSUM; (CASO4.XH2O) CAS:13397-24-5 RTECS #:MG2360000 OSHA PEL:N/K

ACGIH TLV:N/K

Ingred Name:CALCIUM OXIDE; (CAO) (SMALL AMOUNT)
CAS:1305-78-8
RTECS #:EW3100000
OSHA PEL:5 MG/M3
ACGIH TLV:2 MG/M3

Ingred Name:MAGNESIUM OXIDE; (MGO) (SMALL AMOUNT)
CAS:1309-48-4
RTECS #:OM3850000
OSHA PEL:15 MG/M3 PARTICULATE
ACGIH TLV:10 MG/M3; FUME

Ingred Name:POTASSIUM SULFATE; (K2SO4) (SMALL AMOUNT)
CAS:7646-93-7
RTECS #:TS7200000
OSHA PEL:N/K
ACGIH TLV:N/K

Ingred Name:SODIUM SULFATE; (NA2SO4) (SMALL AMOUNT)
CAS:7757-82-6
RTECS #:WE1650000
OSHA PEL:N/K
ACGIH TLV:N/K

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER. Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:ACUTE: WET CEMENT, ESPECIALLY AS INGREDIENT IN PLASTIC (UNHARDENED) CONCRETE, MORTAR/SLURRIES CAN DRY SKIN & CAUSE CAUSTIC BURNS. DIRECT CONT W/EYES CAN CAUSE IRRIT.

INHAL CAN IRRIT UPPER RESP SYS. CH RONIC: CEMENT DUST CAN CAUSE INFLAMM OFLINING TISS OF INTERIOR OF NOSE & INFLAMM OF CORNEA. (EFTS OF OVEREXP)

Explanation of Carcinogenicity:NOT RELEVANT.

Effects of Overexposure:HLTH HAZ: HYPERSENSITIVE INDIVIDUALS MAY DEVELOP ALLERGIC DERM. (CEMENT MAY CONTAIN TRACE (LESS THAN 0.05%) AMTS OF CHROMIUM SALTS/CMPDS INCL HEXAVALENT CHROMIUM/OTHER METALS FOUND TO BE HAZ/TOX IN SO ME CHEM FORMS. THESE METALS ARE MOSTLY PRESENT AS TRACE SUBSTITUTIONS W/IN PRINCIPLE MINERALS). Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

First Aid:EYES: IRRIGATE IMMEDIATELY AND REPEATEDLY WITH WATER FOR AT LEAST 15 MINUTES AND GET PROMPT MEDICAL ATTENTION. SKIN: FLUSH WITH COPIOUS AMOUNTS OF WATER. SEE MD . INHALATION: REMOVE TO FRESH AIR . SUPPORT BREATHING (GIVE OXYGEN OR ARTIFICIAL RESPIRATION) . INGESTION: CALL MD IMMEDIATELY .

Flash Point:NON-COMBUSTIBLE.

Extinguishing Media: USE MEDIA SUITABLE FOR SURROUNDING FIRE .

Fire Fighting Procedures:WEAR NIOSH/MSHA APPROVED SCBA & FULL
PROTECTIVE EQUIPMENT .
Unusual Fire/Explosion Hazard:NONE.

Spill Release Procedures:USE DRY CLEANUP METHODS THAT DO NOT DISPERSE THE DUST INTO THE AIR. AVOID BREATHING THE DUST. EMERGENCY PROCEDURES ARE NOT REQUIRED. Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling and Storage Precautions:NONE SPECIFIED BY MANUFACTURER. Other Precautions:PRECAUTIONS MUST BE TAKEN, CEMENT BURNS WITH LITTLE WARNING. LITTLE HEAT IS SENSED.

======= Exposure Controls/Personal Protection ==========

Respiratory Protection: IN DUSTY ENVIRONMENT, THE USE OF A NIOSH/MSHA APPROVED RESPIRATOR IS RECOMMENDED. TOTAL DUST CONTAINING NO ASBESTOS AND LESS THAN 1% SILICA-10MG/M3 (ACGIH TLV); TOTAL DUST-50 MILLION PARTICLE/FT3 (OSH A PEL (TRANSITIONAL)); TOTAL (SUP DAT) Ventilation:LOCAL EXHAUST CAN BE USED TO CONTROL AIRBORNE DUST LEVELS. Protective Gloves: IMPERVIOUS, ABRASION & ALKALI-RESISTANT. Eye Protection: ANSI APPRVD CHEM WORKERS GOGGS . Other Protective Equipment: EMER EYEWASH & DELUGE SHOWER WHICH MEET ANSI DESIGN CRITERIA . WEAR BOOTS PROT CLTHG TO PREVENT SKIN (SUP DAT) Work Hygienic Practices: USE BARRIER CREAMS. IMMED AFTER WORKING W/CEMENT/CEMENT-CONTAINING MATLS, WORKERS SHOULD SHOWER W/SOAP & WATER. Supplemental Safety and Health OTHER PROT EQUIP: FROM PRLNG CONT W/WET CEMENT IN PLASTIC CONCRETE, MORTAR OR SLURRIES. RESP PROT: DUST-10MG/M3 RESPIRABLE DUST-5MG/M3 (OSHA PEL (FINAL)). Spec Gravity:3.15 (H\*20=1) pH:12.4 Solubility in Water:SLIGHT (0.1-1.0%) Appearance and Odor: GRAY TO WHITE POWDER, NO ODOR 

Stability Indicator/Materials to Avoid:YES
ALUMINUM POWDER AND OTHER ALKALINE EARTH ELEMENTS WILL REACT WITH WET
MORTAR OR CONCRETE.
Stability Condition to Avoid:KEEP DRY UNTIL USE.
Hazardous Decomposition Products:HYDROGEN GAS.

Waste Disposal Methods:SMALL AMOUNTS OF MATERIAL CAN BE DISPERSED OF AS COMMON WASTE OR RETURNED TO THE CONTAINER FOR LATER USE IF IT IS NOT CONTAMINATED. LARGE VOLUMES MAY REQUIRE SPECIAL HANDLING. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, & FEDERAL REGULATIONS Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.

.

### **PRODUCT DATA SHEET**

#### PRODUCT NAME

- Lehigh White Portland Cement Type I
- Lehigh White Portland Cement Type II/V
- Lehigh High Early Strength White Portland Cement, Type III
- Lehigh White Portland Cement Water Repellent Added
- Lehigh White Masonry Cement, Type N
- Lehigh White Masonry Cement, Type S

#### MANUFACTURER

Lehigh Cement Company White Cement Division 7660 Imperial Way • Allentown, PA 18195 Phone(800)523-5488 (610)366-4600 Fax: (610)366-4638 E-mail: info@lehighwhitecement.com www.lehighwhitecement.com

#### **PRODUCT DESCRIPTION**

Portland cement is the most widely used construction material in the world. Lehigh Cement Company has been producing quality portland cements since 1897. Since its founding over a century ago, Lehigh has built a reputation for serving the construction industry with high performance products that encourage creativity and ensure longevity.

Lehigh Cement Company/White Cement Division is the foremost supplier of white cements in North America, and the company actively participates in industry associations and trade shows held throughout the United States.

The available types and recommended uses of the company's cement products are described under APPLICATIONS. Depending on the application, Lehigh products may be specified in Division 3 – Concrete or Division 4 - Masonry.

#### APPLICATIONS

#### Lehigh White Portland Cement, Type I

**Division 3-Concrete** 

 Lehigh White Type I Portland Cement is recommended for general architectural applications, such as precast concrete, cast-in-place concrete, terrazzo, tile grout, portland cement paint, masonry units, swimming pools, glass fiber reinforced concrete, surface bonding mortars, ornamental statuary, floor tiles, concrete roof tiles, and concrete products, perimeter security, cast stone pavers; and for traffic safety construction such as concrete median barriers, bridge parapets, guardrails, sound barrier walls, earth retaining walls, reflecting curbs and other delineators. Lehigh White Type I Portland Cement may be used as a base to produce vibrant and true colors prized in almost any architectural concrete application.

**Division 4-Masonry** 

#### Lehigh White Portland Cement - Type II/V

 Is typically suitable for the same applications as Type I cement. Has been formulated to provide moderate heat of hydration and sulfate resistance, for applications where sulfates in ground waters and/or soils are higher than normal or in mass concrete work where lower heat of hydration is desired.

#### Lehigh High Early Strength White Portland Cement, Type III

 Precast and prestressed architectural concrete; architectural concrete masonry units; cold weather construction; concrete brick, pavers, roof tiles.

#### Lehigh White Portland Cement - Water Repellent Added

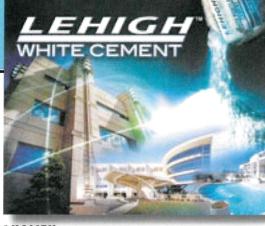
 Plastering applications, masonry mortar, precast concrete and concrete products, cast stone and as a component in the manufacturer of cementitious coatings and waterproofing products.

#### Lehigh White Masonry Cement, Type N

 For use in masonry mortar and stucco mixtures where a white or bright colored mortar joint or stucco is desired; for use in preparing ASTM C270 Type N mortar.

#### Lehigh White Masonry Cement, Type S

 For use in white masonry mortar where the higher strength requirements of ASTM C270 Type S are needed.



#### QUALITY

Lehigh White Portland and Masonry Cements are produced using carefully selected raw materials and rigid manufacturing standards to assure uniform whiteness. This whiteness is a necessity when specifying for traffic safety structures, or expanding architectural boundaries through design, color, and texture. When consistent bright color is desired you can depend on Lehigh White Cements.

#### **SUSTAINABILITY**

Limestone and other minerals used to produce portland cements rank fourth in the top five most abundant elements on earth. Portland cement concrete construction can significantly reduce energy consumption in some climates due to the thermal mass properties of the material. White Portland cement concrete has high reflectivity value which helps reduce heat island effects.

#### **STORAGE**

Lehigh White Portland and Masonry Cements are moisture sensitive materials. Portland cement must be kept dry in order to retain its quality. Bulk Lehigh White Portland Cement should be stored in weather tight bins or silos. Lehigh White Portland and Masonry Cement bags should be kept in a dry area and stored on pallets whenever possible.

#### AVAILABILITY

Lehigh White Portland and Masonry Cements are available through a network of distributors and concrete producers throughout the United States. For more information on Lehigh products or technical assistance, visit us online at www.lehighwhitecement.com or phone 800-523-5488.

Thinking

#### LIMITATIONS

Portland cement when dry is non-hazardous. When in contact with moisture (such as in eyes or skin) or when mixed with water to make concrete, mortar or grout, it becomes highly caustic and will burn (as severely as third-degree) the eyes or skin. Inhalation of dry Portland cement can irritate the upper respiratory system.

#### WARRANTY

The information and statements herein are believed to be reliable, but are not to be construed as a warranty or representation for which we assume legal responsibility. No other warranty, representation, or condition of any kind, expressed or implied (including NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), shall apply. Having no control over the use of cement, Lehigh Companies will not guarantee finished work, nor shall they be liable for consequential damages.

For more information visit our web site: www.lehighwhitecement.com e-mail: info@lehighwhitecement.com

# **Safety Data Sheet Masonry Cement**

#### **Section 1. Identification**

#### GHS product identifier:

Chemical name:

#### Masonry Cement

Other means of identification: Relevant identified uses of the substance or mixture and uses advised against: Calcium compounds, calcium silicate compounds, and other calcium compounds containing iron and aluminum make up the majority of this product. Mortar or Masonry Cement, Type N, S, M, CSA Type N, S, MCN, MCS, Hydraulic Cement

Building materials, construction, a basic ingredient in masonry motars and concrete.

Supplier's details:

300 E. John Carpenter Freeway, Suite 1645 Irving, TX 75062 (972) 653-5500

Emergency telephone number (24 hours): 0

## hours): CHEMTREC: (800) 424-9300

#### Section 2. Hazards Identification

Overexposure to cement can cause serious, potentially irreversible skin or eye damage in the form of chemical (caustic) burns, including third degree burns. The same serious injury can occur if wet or moist skin has prolonged contact exposure to dry cement.

 OSHA/HCS status:
 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

 Classification of the substance or mixture:
 SKIN CORROSION/IRRITATION – Category 1

 SERIOUS EYE DAMAGE/EYE IRRITATION – Category 1
 SKIN SENSITIZATION – Category 1

 CARCINOGENICITY/INHALATION – Category 1
 CARCINOGENICITY/INHALATION – Category 1

 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
 [Respiratory tract irritation] – Category 3

#### **GHS** label elements

Hazard pictograms:

Signal word: Hazard statements:

Precautionary statements: Prevention:

Response:

Storage:

Disposal:



Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. May cause cancer.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Use outdoors in a well ventilated area. Wash any exposed body parts thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.Contaminated clothing must not be allowed out of the workplace. If exposed or concerned: Immediately get medical advice/attention if you feel unwell or irritation or rash occurs. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. If inhaled: Remove person to fresh air and keep comfortable for breathing. If swallowed: Rinse mouth. Do not induce vomiting.

Restrict or control access to stockpile areas (store locked up). Engulfment hazard: To prevent burial or suffocation, do not enter a confined space, such as a silo, bulk truck or other storage container or vessel that stores or contains masonry cement without an effective procedure for assuring safety. Store in a well ventilated area. Keep container tightly closed. Dispose of contents/container in accordance with local/regional/national/international

Page 1 of 10

Hazards not otherwise classified (HNOC):

regulations.

Supplemental Information:

None known

Respirable Crystalline Silica (RCS) may cause cancer. Repeated inhalation of respirable crystalline silica (quartz) may cause lung cancer according to IARC and NTP; ACGIH states that it is a suspected cause of cancer. Other forms of RCS (e.g., tridymite and cristobalite) may also be present or formed under certain industrial processes.

#### Section 3. Composition/information on ingredients

Substance/mixture: Chemical Name: Mixture

Calcium compounds, calcium silicate compounds, and other calcium compounds containing iron and aluminum make up the majority of this product.

#### CAS number/other identifiers

Ingredient name	%	CAS number
Masonry Cement	~95%	65997-15-1
The structure of Masonry cement may contain the following in some concentration ranges:		
Calcium oxide	A-B	1305-78-8
Quartz	C-D	14808-60-7
Hexavalent chromium*	E-F	18450-29-9
Masonry cement also contains gypsum, limestone and magnesium oxide in various		
concentrations. However, because these components are not classifiable as a hazard under Title	9	
29 <u>Code of Federal Regulations</u> 1910.1200, they are not required to be listed in this section.		
Gypsum	G-H	13397-24-5
Limestone	I-J	1317-65-3
Magnesium oxide	K-L	1309-48-4

Any concentration shown as a range is to protect confidentiality or is due to process variation. \*Hexavalent chromium is included due to dermal sensitivity associated with the component.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

#### Section 4. First aid measures

#### Description of necessary first aid measures

Eye Contact: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Inhalation: Seek medical help if coughing or other symptoms persist. Inhalation of large amounts of masonry cement requires immediate medical attention. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If the individual is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-tomouth resuscitation. If unconscious, place in a recovery position and get medical attention immediately. Maintain an open airway. Skin Contact: Get medical attention immediately. Heavy exposure to masonry cement dust, wet mortar or associated water requires prompt attention. Quickly remove contaminated clothing, shoes, and leather goods such as watchbands and belts. Quickly and gently blot or brush away excess masonry cement. Immediately wash thoroughly with lukewarm, gently flowing water and non-abrasive pH natural soap. Seek medical attention for rashes, burns, irritation, dermatitis and prolonged unprotected exposures to wet cement, cement mixtures or liquids from wet cement. Burns should be treated as caustic burns. Masonry cement causes skin burns with little warning. Discomfort or pain cannot be relied upon to alert a person to a serious injury. You may not feel pain or the severity of the burn until hours after the exposure. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure.

Page 2 of 10

Ingestion:

Get medical attention immediately. Call a poison center or physician. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING unless directed to do so by medical personnel. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Have victim drink 60 to 240 mL (2 to 8 oz.) of water. Stop giving water if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

#### Most important symptoms/effects, acute and delayed potential acute health effects

Eye contact:Causes serious eye damage.Inhalation:May cause respiratory irritation.Skin contact:Causes severe burns. May cause an allergic skin reaction.Ingestion:May cause burns to mouth, throat and stomach.

#### **Over-exposure signs/symptoms**

Eye contact: Inhalation: Skin contact:	Adverse symptoms may include the following: pain, watering and redness Adverse symptoms may include the following: respiratory tract irritation and coughing Adverse symptoms may include the following: pain or irritation, redness and blistering may
	occur, skin burns, ulceration and necrosis may occur
Ingestion:	Adverse symptoms may include the following: stomach pains

#### Indication of immediate medical attention and special treatment needed, if necessary

 Notes to physician:
 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

 Specific treatments:
 Not applicable.

 Protection of first-aiders:
 No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

#### Section 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing media: Unsuitable extinguishing media: Specific hazards arising from the chemical:	Use an extinguishing agent suitable for the surrounding fire. Do not use water jet or water-based fire extinguishers. No specific fire or explosion hazard.
Hazardous thermal decomposition	Decomposition products may include the following materials: carbon dioxide, carbon monoxide,
Products:	sulfur oxides and metal oxide/oxides
Special protective actions for fire-	Move containers from fire area if this can be done without risk. Use water spray to keep fire-
fighters:	exposed containers cool.
Special protective equipment for fire-	Fire-fighters should wear appropriate protective equipment and self-contained breathing
fighters:	apparatus (SCBA) with a full face-piece operated in positive pressure mode.

#### Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training. Avoid touching or walking through spilled material. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: Environmental precautions: For personal protective clothing requirements, please see Section 8. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has entered the environment, including waterways, soil or air. Materials can enter waterways through drainage systems.

#### Methods and materials for containment and cleaning up

Small spill:

Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of waste material by using a licensed waste disposal contractor.

Large spill:

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place dust in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Large spills to waterways may be hazardous due to alkalinity of the product. Dispose of waste material using a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

adhere to the walls of a confined space and then release or fall suddenly (engulfment).

#### Section 7. Handling and storage

#### Precautions for safe handling

Protective measures:	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure by obtaining and following special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material and keep the container tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities:	A key to using the product safely requires the user to recognize that masonry cement reacts chemically with water to produce calcium hydroxide which can cause severe chemical burns. Every attempt should be made to avoid skin and eye contact with masonry cement. Do not get masonry cement inside boots, shoes or gloves. Do not allow wet, saturated clothing to remain against the skin. Promptly remove clothing and shoes that are dusty or wet with cement mixtures. Launder/clean clothing and shoes before reuse. Do not enter a confined space that stores or contains masonry cement unless appropriate procedures and protection are available. Portland cement can build up or

#### Section 8. Exposure controls/personal protection

#### **Control parameters**

#### **Occupational exposure limits**

Ingredient name

**Exposure limits** 

Cement, masonry, chemicals ACGIH TLV (United States, 3/2012) TWA: 1 mg/m<sup>3</sup> 8hours. Form: Respirable fraction NIOSH REL (United States, 6/2009) TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Respirable fraction TWA: 10 mg/m3 10 hours. Form: Total OSHA PEL (United States, 6/2010) TWA: 5mg/m<sup>3</sup>. 8 hours. Form: Respirable fraction TWA: 15 mg/m<sup>3</sup>. 8 hours. Form: Total dust Calcium oxide ACGIH TLV (United States, 3/2012) TWA: 2 mg/m<sup>3</sup> 8 hours NIOSH REL (United States, 6/2009) TWA: 2mg/m<sup>3</sup> 10 hours. OSHA PEL (United States, 6/2010) TWA: 5 mg/m3 8 hours. Limestone NIOSH REL (United States, 6/2009) TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Respirable fraction TWA: 10 mg/m<sup>3</sup> 10 hours. Form: Total OSHA PEL (United States, 6/2010) TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust Magnesium oxide ACGIH TLV (United States, 3/2012) TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction OSHA PEL (United States, 6/2010) TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total particulates Quartz ACGIH TLV (United States, 3/2012) TWA: 0.025 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction NIOSH REL (United States, 6/2009) TWA: 0.05 mg/m<sup>3</sup> 10 hours. Form: Respirable dust OSHA PEL Z-3 (United States, 9/2005) TWA: 10 mg/m<sup>3</sup> divided by % SiO<sub>2</sub> + 2: Respirable TWA: 30 mg/m<sup>3</sup> divided by % SiO<sub>2</sub> + 2: Total Calcium sulfate (gypsum) ACGIH TLV (United States, 3/2012) TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction NIOSH REL (United States, 6/2009) TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction TWA: 10 mg/m3 8 hours. Form: Total dust OSHA PEL Z-1 (United States, 2/2006) TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction TWA: 15 mg/m3 8 hours. Form: Total dust Appropriate engineering controls: Use only with adequate ventilation. If user operations generate dust, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Page 5 of 10

Hygiene measures:	Clean water should always be readily available for skin and (emergency) eye washing. Periodically wash areas contacted by masonry cement with a pH neutral soap and clean, uncontaminated water. If clothing becomes saturated with masonry cement, garments should be removed and replaced with clean, dry clothing.
Eye/face protection:	To prevent eye contact, wear safety glasses with side shields, safety goggles or face shields when handling dust or wet cement. Wearing contact lenses when working with cement is not recommended.
Skin protection	
Hand protection:	Use impervious, waterproof, abrasion and alkali-resistant gloves. Do not rely on barrier creams in place of impervious gloves. Do not get masonry cement inside gloves.
Body protection:	Use impervious, waterproof, abrasion and alkali-resistant boots and protective long-sleeved and long- legged clothing to protect the skin from contact with wet cement. To reduce foot and ankle exposure, wear impervious boots that are high enough to prevent cement from getting inside them. Do not get cement inside boots, shoes, or gloves. Remove clothing and protective equipment that becomes saturated with cement and immediately wash exposed areas of the body.
Other skin protection:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.
Respiratory protection:	Use properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product, and assigned protection factor of the selected respirator.

#### Section 9. Physical and chemical properties

Not available

Not applicable

Not applicable

#### Appearance

Physical State: Color: Odor: Odor threshold: pH: Melting point: Boiling point: Flash point: Burning time: Burning rate: Evaporation Rate: Flammability (solid, gas): Solid. [Powder] Gray or white Odorless Not available >11.5 [Conc. (% w/w): 1%] Not available >1000°C (>1832°F) Not flammable. Not combustible. Not available

Vapor density: Relative density: Solubility: Solubility in water: Partition coefficient: n-octanol/water: stible. Auto-ignition temperature: Decomposition temperature: SADT:

Vapor pressure:

Viscosity:

Lower and Upper explosive flammable limits

Not applicable Not applicable 2.3 to 3.1 Slightly soluble in water 0.1 to 1%

Not applicable Not applicable Not available Not available Not applicable

#### Section 10. Stability and reactivity

Reactivity: Chemical Stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials:	Reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete. The product is stable. Under normal circumstances of storage and use, hazardous reactions will not occur. No specific data. Reactive or incompatible with the following materials: oxidizing materials, acids, aluminum and ammonium salt. Masonry 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.
Hazardous decomposition products:	tetranuoride. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Page 6 of 10



# Section 11. Toxicological information

## Information on toxicological effects

Acute toxicity: Irritation/Corrosion:	Masonry Cement LD50/LC50 = Not available Skin: May cause skin irritation. May cause serious burns in the presence of moisture.
initation/corrosion.	Eyes: Causes serious eye damage. May cause burns in the presence of moisture.
Sonaitization	Respiratory: May cause respiratory tract irritation.
Sensitization:	May cause sensitization due to the potential presence of trace amounts of hexavalent chromium.
Mutagenicity:	There are no data available.
Consistentialtur	

Carcinogenicity: Classification below:

Product/ingredient name	OSHA	IARC	ACGIH	NTP
Cement, masonry, chemicals	-	-	A4	-
Quartz	-	1	A2	Known to be a human carcinogen.

Reproductive toxicity: Teratogenicity: There are no data available. There are no data available.

Specific target organ toxicity (single exposure)

Name	Category	Route of Exposure	Target Organs
Calcium oxide	Category 3	Inhalation and skin contact	Respiratory tract irritation, skin irritation
Cement, masonry, chemicals	Category 3	Inhalation and skin contact	Respiratory tract irritation, skin irritation

#### Specific target organ toxicity (repeated exposure)

Name	Category	Route of Exposure	Target Organs
Quartz	Category 1	Inhalation	Respiratory tract and kidneys

Aspiration hazard:

There are no data available.

### Information on the likely routes of exposure

Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects:	Eye contact: Causes serious eye damage.
	Inhalation: May cause respiratory irritation.
	Skin contact: Causes severe burns. May cause an allergic skin reaction.
	Ingestion: May cause burns to mouth, throat and stomach.
Symptoms related to the	Eye contact: Adverse symptoms may include the following: pain, watering, redness.
physical, chemical and	Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing
toxicological characteristics:	Skin contact: Adverse symptoms may include the following: pain or irritation, redness, blistering may
	occur, skin burns, ulcerations and necrosis may occur
	Ingestion: Adverse symptoms may include the following: stomach pains
Delayed and immediate effects	Short term exposure
and also chronic effects from	Potential immediate effects: No known significant effects or critical hazards.
short and long term exposure:	Potential delayed effects: No known significant effects or critical hazards.

#### Lehigh Hanson HEIDELBERGCEMENTGroup

 Potential immediate effects: No known significant effects or critical hazards.

 Potential chronic health effects:

 General: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. If sensitized to hexavalent chromium, a severe allergic dermal reaction may occur when subsequently exposed to very low levels.

 Carcinogenicity:
 Masonry cement is not classifiable as a human carcinogen. Crystalline silica is considered a hazard by inhalation. IARC has classified crystalline silica as a Group 1 substance, carcinogenic to humans. This classification is based on the findings of laboratory animal studies (inhalation and implantation) and epidemiology studies that were considered sufficient for carcinogenicity. Excessive exposure to crystalline silica can cause silicosis, a non-cancerous lung disease.

 Mutagenicity: No known significant effects or critical hazards.

 Developmental effects: No known significant effects or critical hazards.

**Numerical measures of toxicity:** Acute toxicity estimates: There are no data available.

## Section 12. Ecological Information

## Toxicity

Product/ingredient name	Result	Species	Exposure
Calcium oxide	Chronic NOEC 100 mg/L Fresh water	Fish-Oreochromis niloticus-Juvenile (Fledgling, Hatchling, Weanling)	46 days

Persistence and degradability:	There are no data available.
Bioaccumulative potential:	There are no data available.
Mobility in soil:	Soil/water partition coefficient (Koc): Not available.
Other adverse effects:	No known significant effects or critical hazards.

#### **Section 13. Disposal considerations**

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Untreated waste should not be released to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe manner. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff, and contact with soil, waterways, drains and sewers.

## Section 14. Transportation information

	DOT Classification	IMDG	IATA
UN number	Not regulated	Not regulated	Not regulated
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	None	None	None
Additional information	-	-	-



Special precautions for user:

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

### **Section 15. Regulatory Information**

TSCA 6 final risk management: Chromium, ion (Cr6+) United States inventory (TSCA 8b): Cements are considered to be statutory mixtures under TSCA. CAS 65997-15-1 is included on the TSCA inventory.

CERCLÁ: This product is not listed as a CERCLA substance Clean Air Act Section 112 (b): Hazardous Air Pollutants (HAPs) – Not listed Clean Air Act Section 602: Class I Substances - Not listed Clean Air Act Section 602: Class II Substances - Not listed DEA List I Chemicals: (Precursor Chemicals) – Not listed DEA List II Chemicals: (Essential Chemicals) – Not listed

### SARA 311/312

Classification:

Immediate (acute) health hazard Delayed (chronic) health hazard

#### Composition/information on ingredients

Name	%	Fire Hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Calcium oxide	A-B	No	No	No	Yes	No
Quartz	>0.1	No	No	No	No	Yes
Chromium, ion (Cr6+)	<0.1	No	No	No	Yes	Yes

### **SARA 313**

	Product name	CAS number	%
Form R-Report requirements	Chromium, ion (Cr6+)	8540-29-9	<0.1

### **State regulations**

Massachusetts: New York:	The following components are listed: cement, masonry, chemicals, limestone None of the components are listed.
New Jersey:	The following components are listed: cement, masonry, chemicals, gypsum, limestone
Pennsylvania:	The following components are listed: cement, masonry, chemicals, gypsum, limestone

#### California Prop. 65

WARNING: This product contains crystalline silica and chemicals (trace metals) known to the State of California to cause cancer, birth defects or other reproductive harm. California law requires the above warning in the absence of definitive testing to prove the defined risks do not exist.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level

## **Lehigh Hanson**

HEIDELBERGCEMENTGroup

Quartz	Yes	No	No.	No.
Chromium, ion (Cr6+)	Yes	Yes	0.001µg/day (inhalation)	8.2 micrograms/day (ingestion)

#### International regulations

International lists:

Canadian Domestic Substances List (DSL): Masonry cement is included on the DSL. Mexico Inventory (INSQ): All components are listed or exempted.

### Section 16. Other Information

Date of issue: 06/01/2015 Version: 06/01/2015 Revised Section(s): N/Ap

### Notice to reader

While the information provided in this safety data sheet is believed to provide a useful summary of the hazards of masonry cement as it is commonly used, the sheet cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with masonry cement to produce masonry cement products. Users should review other relevant material safety data sheets before working with this masonry cement or working on masonry cement products, for example, masonry cement motar.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED. CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY Lehigh Hanson, except that the product shall conform to contracted specifications. The information provided herein was believed by the Lehigh Hanson to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of product and to determine the suitability of the product for its intended use. Buyer's exclusive remedy shall be for damages and no claim of any kind, whether as to product delivered or for non-delivery of product, and whether based on contract, breach of warranty, negligence, or otherwise shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

### **Abbreviations**

- ACGIH American Conference of Governmental Industrial Hygienists CAS - Chemical Abstract Service CERCLA - Comprehensive Emergency Response and Comprehensive Liability Act CFR - Code of Federal Regulations DOT - Department of Transportation GHS - Globally Harmonized System HEPA - High Efficiency Particulate Air IATA - International Air Transport Association IARC - International Agency for Research on Cancer IMDG - International Maritime Dangerous Goods NIOSH --- National Institute of Occupational Safety and Health NOEC - No Observed Effect Concentration NTP - National Toxicology Program OSHA - Occupational Safety and Health Administration PEL - Permissible Exposure Limit REL - Recommended Exposure Limit RQ - Reportable Quantity SARA - Superfund Amendments and Reauthorization Act SDS - Safety Data Sheet TLV — Threshold Limit Value TPQ — Threshold Planning Quantity TSCA — Toxic Substances Control Act TWA - Time-Weighted Average
- UN United Nations



## LEHIGH SOUTHWEST CEMENT COMPANY MATERIAL SAFETY DATA SHEET FOR PORTLAND CEMENT

**REVISED DATE: OCTOBER, 2002** 

#### 1. PRODUCT/COMPANY IDENTIFICATION

Supplier:	Chemical Family: Calcium Compounds
Lehigh Southwest Cement Company	
2300 Clayton Road, Suite 300	Chemical Name and Synonyms:
Concord, CA 94520	Portland Cement (CAS # 65997-15-1), Hydraulic
Phone (925) 609-6920	Cement Types I, I (WRA), II, III, V
Fax (925) 609-6930	
Contact Number:	Trade Name and Synonyms:
(USE SALES OFFICE PHONE NUMBER)	Lehigh Portland Cement Types I, II, III, V
	Lehigh Plastic Cement

**EMERGENCY AND FIRST AID** 

2.

EMERGENCY INFORMATION:	Portland cement is a light gray or white powder. When in contact with moisture in eyes or on skin, or when mixed with water, portland cement becomes highly caustic $(pH > 12)$ and will damage or burn (as severely as third-degree) the eyes or skin. Inhalation may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system or may cause or may aggravate certain lung diseases or conditions. Use exposure controls or personal protection methods described in Section 10.
EYES:	Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.
SKIN:	Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.
INHALATION:	Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalation of large amounts of portland cement require immediate medical attention.
INGESTION:	Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.
ACCIDENTIAL RELEASE MEASURES	Clean up spilled material without causing it to become airborne or mixed with water to limit potential harm. Wear appropriate personal protective equipment. Dispose of waste material according to local, state or federal regulations.

	3. COMPOSITION I	NFORMATION	
<b>DESCRIPTION:</b>	This product consists of finely ground portland cement clink mixed with a small amount of gypsum (calcium sulfate dihydrate). The portland cement clinker is made by heating high temperature a mixture of substances such as limestone, sand, clay and shale. Portland cement is essentially hydrauli calcium silicates contained in a crystalline mass, not separab into individual components. Major compounds are:		alcium sulfate is made by heating to a such as limestone, essentially hydraulic e mass, not separable
	3CaO•SiO <sub>2</sub> 2CaO•SiO <sub>2</sub> 3CaO•Al <sub>2</sub> O <sub>3</sub> 4CaO•Al <sub>2</sub> O <sub>3</sub> •Fe CaSO <sub>4</sub> •2H <sub>2</sub> O	Tricalcium Silicate Dicalcium Silicate Tricalcium Aluminate 203 Tetracalcium aluminoferrite Calcium Sulfate dihydrate (Gypsum)	CAS #12168-85-3 CAS #10034-77-2 CAS #12042-78-3 CAS #12068-35-8 CAS #7778-18-9 (CAS #13397-24-5)
	4. HAZARDOUS IN	NGREDIENTS	
COMPONENT	OSHA PEL (8-Hour TWA)	ACGIH TLV-TWA (1995-1996)	NIOSH REL (8-Hour TWA)
<b>Portland Cement</b> (CAS #65997-15-1) 50 to 95% by weight	5 mg respirable dust/m <sup>3</sup> 15 mg total dust/m <sup>3</sup>	10 mg total dust/m <sup>3</sup>	
<b>Calcium sulfate</b> (CAS #7778-18-9) [Gypsum (CAS #13397-24-5)] 0 to 10% by weight	5 mg respirable dust/m <sup>3</sup> 15 mg total dust/m <sup>3</sup>	10 mg total dust/m <sup>3</sup>	
<b>Iron oxide</b> (CAS #1309-37-1) 0 to 15% by weight	10 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	
<b>Calcium carbonate</b> (CAS #1317-65-3) 0 to 5% by weight	5 mg respirable dust/m <sup>3</sup> 15 mg total dust/m <sup>3</sup>	10 mg total dust/m <sup>3</sup>	
<b>Magnesium oxide</b> (CAS #1309-48-4) 0 to 5% by weight	15 mg total dust/m <sup>3</sup>	10 mg total dust/m <sup>3</sup>	
<b>Calcium oxide</b> (CAS #1305-78-8) 0 to 5% <sup>1</sup> by weight	5 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	
<b>Crystalline silica</b> (CAS #14808-60-7) 0 to 5% by weight	$\frac{10 \text{ mg of respirable dust/m}^3}{\% \operatorname{SiO}_2 + 2}$ $\frac{30 \text{ mg of total dust/m}^3}{\% \operatorname{SiO}_2 + 2}$ $\frac{250 \text{ million particles/ft}^3}{\% \operatorname{SiO}_2 + 5}$	0.05 mg respirable quartz/m <sup>3</sup>	0.05 mg respirable quartz dust/m³

#### TRACE INGREDIENTS:

Due to the use of substances mined from the earth's crust, trace amounts of naturally occurring, potentially harmful constituents may be detected during chemical analysis. Portland cement may contain up to 0.75% insoluble residue. A small amount of this residue includes free crystalline silica. Portland cement also may contain trace (<0.05%) amounts of chromium salts or compounds (including hexavalent chromium) or other metals (including nickel compounds) found to be hazardous or toxic in some chemical forms. These metals are present mostly as trace substitutions within the principal minerals. Other trace constituents may include potassium and sodium sulfate compounds.

<sup>&</sup>lt;sup>1</sup> If Portland/Lime blended product "0 to 25%" values.

5. HA2	ZARD IDENTIFICATION
POTENTIAL HEALTH EFFECTS:	NOTE: Potential health effects may vary depending upon the duration and degree of exposure. To reduce or eliminate health hazards associated with this product, use exposure controls or personal protection methods as described in Section 10.
EYE CONTACT:	(Acute/Chronic) Exposure to airborne dust may cause immediate or delayed irritation or inflammation of the cornea. Eye contact by larger amounts of dry powder or splashes of wet portland cement may cause effects ranging from moderate eye irritation to chemical burns and blindness.
SKIN CONTACT:	(Acute) Exposure to dry portland cement may cause drying of the skin with consequent mild irritation or more significant effects attributable to aggravation of other conditions. Discomfort or pain cannot be relied upon to alert a person to a hazardous skin exposure.
	(Chronic) Dry portland cement coming in contact with wet skin or exposure to wet portland cement may cause more severe skin effects, including thickening, cracking or fissuring of the skin. Prolonged exposure can cause severe skin damage in the form of chemical (caustic) burns.
	(Acute/Chronic) Some individuals may exhibit an allergic response upon exposure to portland cement. The response may appear in a variety of forms ranging from a mild rash to severe skin ulcers.
INHALATION:	(Acute) Exposure to portland cement may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system. Pre-existing upper respiratory and lung diseases may be aggravated by inhalation of portland cement.
	(Chronic) Inhalation exposure to free crystalline silica may cause delayed lung injury including silicosis, a disabling and potentially fatal lung disease, and/or cause or aggravate other lung diseases or conditions.
INGESTION:	(Acute/Chronic) Internal discomfort or ill effects are possible if large quantities are swallowed.
CARCINOGENIC POTENTIAL:	Portland cement is not recognized as a carcinogen by NTP, OSHA, or IARC. However, it may contain trace amounts of heavy metals recognized as carcinogens by these organizations. In addition, IARC classifies crystalline silica, a trace constituent, as a known human carcinogen (Group I). NTP has characterized respirable silica as "reasonably anticipated to be a carcinogen." (See also Section 13.)

### PHYSICAL/CHEMICAL DATA

6.

8.

APPEARANCE/ODOR:	Gray, white or colored powder, odorless	PHYSICAL STATE:	Solid (Powder)
BOILING POINT:	> 1000°C	MELTING POINT:	Not applicable
VAPOR PRESSURE:	Not applicable	VAPOR DENSITY:	Not applicable
pH (IN WATER) (ASTM D 1293-95)	12 to 13	SOLUBILITY IN WATER:	Slightly soluble (0.1% to 1.0%)
SPECIFIC GRAVITY ( $H_2O$ = 1.0):	3.15	EVAPORATION RATE:	Not applicable

#### FIRE AND EXPLOSION

	7. ]	FIRE AND EXPLOSION	
FLASH POINT:	None	LOWER EXPLOSIVE LIMIT:	None
AUTO IGNITION TEMPERATURE:	Not combustible	UPPER EXPLOSIVE LIMIT:	None
FLAMMABLE LIMITS	Not applicable	SPECIAL FIRE FIGHTING PROCEDURES:	None
EXTINGUISHING MEDIA:	Not combustible	UNUSUAL FIRE AND EXPLOSION HAZARDS:	None
HAZARDOUS COMBUSTION PRODUCTS:	None		

#### STABILITY AND REACTIVITY DATA

STABILITY:	Product is stable. Keep dry until used.
CONDITIONS TO AVOID:	Unintentional contact with water. Contact with water will result in hydration and produces (caustic) calcium hydroxide.
INCOMPATIBILITY:	Wet portland cement is alkaline. As such, it is incompatible with acids, ammonium salts and aluminum metal.
HAZARDOUS DECOMPOSITION:	Will not occur.
HAZARDOUS POLYMERIZATION:	Will not occur.

#### 9. PRECAUTIONS FOR HANDLING, STORAGE AND DISPOSAL HANDLING AND STORAGE Keep dry until used. Handle and store in a manner so that airborne dust does not exceed applicable exposure limits. Use adequate ventilation and dust collection. Use exposure control and personal protection methods as described in Section 10. **SPILL:** Use dry clean-up methods that do not disperse dust into the air or entry into surface water. Material can be used if not contaminated. Place in an appropriate container for disposal or use. Avoid inhalation of dust and contact with skin and eyes. Use exposure control and personal protection methods as described in Section 10. **DISPOSAL:** Comply with all applicable local, state and federal regulations for disposal of unusable or contaminated materials. Dispose of packaging/containers according to local, state and federal regulations.

#### 10. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>RESPIRATORY PROTECTION:</b>	Use local exhaust or general dilution ventilation to control dust levels below applicable exposure limits. Minimize dispersal of dust into the air.
	If local or general ventilation is not adequate to control dust levels below applicable exposure limits or when dust causes irritation or discomfort, use MSHA/NIOSH approved respirators.
EYE PROTECTION:	Wear safety glasses with side shields or goggles to avoid contact with the eyes. In extremely dusty environments and unpredictable environments, wear tight-fitting unvented or indirectly vented goggles to avoid eye irritation or injury. Contact lenses should not be worn when handling cement or cement containing products.
SKIN PROTECTION:	Wear impervious abrasion- and alkali-resistant gloves, boots, long-sleeved shirt, long pants or other protective clothing to prevent skin contact. Promptly remove clothing dusty with dry portland cement or clothing dampened with moisture mixed with portland cement, and launder before re-use. If contact occurs, wash areas contacted by material with pH neutral soap and water.

### 11. TRANSPORTATION DATA

Portland cement is not hazardous under U.S. DOT regulations.

### 12. TOXICOLOGICAL AND ECOLOGICAL INFORMATION

For a description of available, more detailed toxicological and ecological information, contact Lehigh Cement Company.

### 13. OTHER REGULATORY INFORMATION

Status under US OSHA Hazard Communication Rule 29 CFR 1910.1200:	Portland cement is considered a hazardous chemical under this regulation and should be included in the employer's hazard communication program.
Status under CERCLA/Superfund, 40 CFR 117 and 302:	Not listed.
Hazard Category under SARA (Title III), Sections 311 and 312:	Portland cement qualifies as a hazardous substance with delayed health effects.
Status under SARA (Title III), Section 313:	Maybe subject to reporting requirements under Section 313. Contact sales office for further information.
Status under TSCA (as of May 1997):	Some substances in portland cement are on the TSCA inventory list.
Status under the Federal Hazardous Substances Act:	Portland cement is a hazardous substance subject to statutes promulgated under the subject act.

Status under California Proposition 65:

This product contains crystalline silica, a substance known to the State of California to cause cancer. This product also may contain trace amounts of heavy metals known to the State of California to cause cancer, birth defects or other reproductive harm.

#### 14. OTHER INFORMATION

This MSDS provides information on various types of portland cement products. A particular product's composition may vary from sample to sample. The information provided herein is believed by Lehigh Cement Company to be accurate at the time of preparation or prepared from sources believed to be reliable. Health and safety precautions in this data sheet may not be adequate for all individuals or situations. Users have the responsibility to comply with all laws and procedures applicable to the safe handling and use of the product, to determine the suitability of the product for its intended use, and to understand possible hazards associated with mixing portland cement with other materials. This product neither contains nor is directly manufactured with any controlled ozone depleting substances, Class I and II. SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY LEHIGH CEMENT COMPANY.

#### **ABBREVIATIONS**

ACGIH	American Conference of Governmental Industrial Hygienists
ASTM	American Society for Testing and Materials
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
ft <sup>3</sup>	Cubic foot
IARC	International Agency for Research on Cancer
m <sup>3</sup>	Cubic meter
mg	Milligram
MSHA	Mine Safety and Health Administration
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average



## LEHIGH WHITE CEMENT COMPANY MATERIAL SAFETY DATA SHEET FOR WHITE PORTLAND CEMENT

**REVISED DATE: Jan 2015** 

### 1. PRODUCT/COMPANY IDENTIFICATION

Supplier: Lehigh White Cement Company 7660 Imperial Way – Allentown, PA 18195 Contact our nearest Sales office for further information (SEE PAGE 7). Sales office phone numbers and locations are also listed on our WEBSITE (www.lehighwhitecement.com).

2.

Chemical Family: Calcium Compounds

**Chemical Name and Synonyms:** Portland Cement (CAS # 65997-15-1), Hydraulic Cement Types I, I (WRA), II, III, V **Trade Name and Synonyms:** Lehigh White Portland Cement

#### **EMERGENCY AND FIRST AID**

EMERGENCY INFORMATION:	Portland cement is a light gray or white powder. When in contact with moisture in eyes or on skin, or when mixed with water, portland cement becomes highly caustic ( $pH > 12$ ) and will damage or burn (as severely as third-degree) the eyes or skin. Inhalation may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system or may cause or may aggravate certain lung diseases or conditions. Use exposure controls or personal protection methods described in Section 10.
EYES:	Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.
SKIN:	Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.
INHALATION:	Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalation of large amounts of portland cement require immediate medical attention.
INGESTION:	Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.
ACCIDENTIAL RELEASE MEASURES	Clean up spilled material without causing it to become airborne or mixed with water to limit potential harm. Wear appropriate personal protective equipment. Dispose of waste material according to local, state or federal regulations.

#### **COMPOSITION INFORMATION**

3.

4.

#### **DESCRIPTION:**

This product consists of finely ground portland cement clinker mixed with a small amount of gypsum (calcium sulfate dihydrate). The portland cement clinker is made by heating to a high temperature a mixture of substances such as limestone, sand, clay and shale. Portland cement is essentially hydraulic calcium silicates contained in a crystalline mass, not separable into individual components. Major compounds are:

3CaO•SiO <sub>2</sub>	Tricalcium Silicate	CAS #12168-85-3
2CaO•SiO <sub>2</sub>	Dicalcium Silicate	CAS #10034-77-2
$3CaO \cdot Al_2O_3$	Tricalcium Aluminate	CAS #12042-78-3
4CaO•Al <sub>2</sub> O <sub>3</sub> •Fe <sub>2</sub> O <sub>3</sub>	Tetracalcium	CAS #12068-35-8
	aluminoferrite	
CaSO <sub>4</sub> •2H <sub>2</sub> O	Calcium Sulfate	CAS #7778-18-9
	dihydrate (Gypsum)	(CAS #13397-24-5)
CaCO <sub>3</sub>	Calcium Carbonate	CAS #1317-65-3

#### HAZARDOUS INGREDIENTS

COMPONENT	OSHA PEL (8-Hour TWA)	ACGIH TLV-TWA (1995-1996)	NIOSH REL (8-Hour TWA)
<b>Portland Cement</b> (CAS #65997-15-1) 50 to 95% by weight	5 mg respirable dust/m <sup>3</sup> 15 mg total dust/m <sup>3</sup>	10 mg total dust/m <sup>3</sup>	
<b>Calcium sulfate</b> (CAS #7778-18-9) [Gypsum (CAS #13397-24-5)] 0 to 10% by weight	5 mg respirable dust/m <sup>3</sup> 15 mg total dust/m <sup>3</sup>	10 mg total dust/m <sup>3</sup>	
<b>Iron oxide</b> (CAS #1309-37-1) 0 to 15% by weight	10 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	
<b>Calcium carbonate</b> (CAS #1317-65-3) 0 to 5% by weight	5 mg respirable dust/m <sup>3</sup> 15 mg total dust/m <sup>3</sup>	10 mg total dust/m <sup>3</sup>	
<b>Magnesium oxide</b> (CAS #1309-48-4) 0 to 5% by weight	15 mg total dust/m <sup>3</sup>	10 mg total dust/m <sup>3</sup>	
Calcium oxide (CAS #1305-78-8) 0 to 5% by weight <sup>1</sup>	5 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	
<b>Crystalline silica</b> (CAS #14808-60-7) 0 to 5% by weight	$\frac{10 \text{ mg of respirable dust/m}^3}{\% \text{ SiO}_2 + 2}$ $\frac{30 \text{ mg of total dust/m}^3}{\% \text{ SiO}_2 + 2}$ $\frac{250 \text{ million particles/ft}^3}{\% \text{ SiO}_2 + 5}$	0.05 mg respirable quartz/m <sup>3</sup>	0.05 mg respirable quartz dust/m³

#### TRACE INGREDIENTS:

Due to the use of substances mined from the earth's crust, trace amounts of naturally occurring, potentially harmful constituents may be detected during chemical analysis. Portland cement may contain up to 0.75% insoluble residue. A small amount of this residue includes free crystalline silica. Portland cement also may contain trace (<0.05%) amounts of chromium salts or compounds (including hexavalent chromium) or other metals (including nickel compounds) found to be hazardous or toxic in some chemical forms. These metals are present mostly as trace substitutions within the principal minerals. Other trace constituents may include potassium and sodium sulfate compounds.

<sup>&</sup>lt;sup>1</sup> If Portland/Lime blended product "0 to 25%" values.

<b>5.</b> HA	AZARD IDENTIFICATION
POTENTIAL HEALTH EFFECTS:	NOTE: Potential health effects may vary depending upon the duration and degree of exposure. To reduce or eliminate health hazards associated with this product, use exposure controls or personal protection methods as described in Section 10.
EYE CONTACT:	(Acute/Chronic) Exposure to airborne dust may cause immediate or delayed irritation or inflammation of the cornea. Eye contact by larger amounts of dry powder or splashes of wet portland cement may cause effects ranging from moderate eye irritation to chemical burns and blindness.
SKIN CONTACT:	(Acute) Exposure to dry portland cement may cause drying of the skin with consequent mild irritation or more significant effects attributable to aggravation of other conditions. Discomfort or pain cannot be relied upon to alert a person to a hazardous skin exposure.
	(Chronic) Dry portland cement coming in contact with wet skin or exposure to wet portland cement may cause more severe skin effects, including thickening, cracking or fissuring of the skin. Prolonged exposure can cause severe skin damage in the form of chemical (caustic) burns.
	(Acute/Chronic) Some individuals may exhibit an allergic response upon exposure to portland cement. The response may appear in a variety of forms ranging from a mild rash to severe skin ulcers.
INHALATION:	(Acute) Exposure to portland cement may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system. Pre-existing upper respiratory and lung diseases may be aggravated by inhalation of portland cement.
	(Chronic) Inhalation exposure to free crystalline silica may cause delayed lung injury including silicosis, a disabling and potentially fatal lung disease, and/or cause or aggravate other lung diseases or conditions.
<b>INGESTION:</b>	(Acute/Chronic) Internal discomfort or ill effects are possible if large quantities are swallowed.
CARCINOGENIC POTENTIAL:	Portland cement is not recognized as a carcinogen by NTP, OSHA, or IARC. However, it may contain trace amounts of heavy metals recognized as carcinogens by these organizations. In addition, IARC classifies crystalline silica, a trace constituent, as a known human carcinogen (Group I). NTP has characterized respirable silica as "reasonably anticipated to be a carcinogen." (See also Section 13.)

## 6. PHYSICAL/CHEMICAL DATA

APPEARANCE/ODOR:	Gray, white or colored powder, odorless	PHYSICAL STATE:	Solid (Powder)
BOILING POINT:	> 1000°C	MELTING POINT:	Not applicable
VAPOR PRESSURE:	Not applicable	VAPOR DENSITY:	Not applicable
pH (IN WATER) (ASTM D 1293-95)	12 to 13	SOLUBILITY IN WATER:	Slightly soluble (0.1% to 1.0%)
SPECIFIC GRAVITY ( $H_2O$ = 1.0):	3.15	EVAPORATION RATE:	Not applicable

### 7. FIRE AND EXPLOSION

	/. F.	IRE AND EXPLOSION	
FLASH POINT:	None	LOWER EXPLOSIVE LIMIT:	None
AUTO IGNITION TEMPERATURE:	Not combustible	UPPER EXPLOSIVE LIMIT:	None
FLAMMABLE LIMITS	Not applicable	SPECIAL FIRE FIGHTING PROCEDURES:	None
EXTINGUISHING MEDIA:	Not combustible	UNUSUAL FIRE AND EXPLOSION HAZARDS:	None
HAZARDOUS COMBUSTION PRODUCTS:	None		

## 8. STABILITY AND REACTIVITY DATA

STABILITY:	Product is stable. Keep dry until used.
CONDITIONS TO AVOID:	Unintentional contact with water. Contact with water will result in hydration and produces (caustic) calcium hydroxide.
INCOMPATIBILITY:	Wet portland cement is alkaline. As such, it is incompatible with acids, ammonium salts and aluminum metal.
HAZARDOUS DECOMPOSITION:	Will not occur.
HAZARDOUS POLYMERIZATION:	Will not occur.

9. PRECAUTIONS FOR	HANDLING, STORAGE AND DISPOSAL
HANDLING AND STORAGE	Keep dry until used. Handle and store in a manner so that airborne dust does not exceed applicable exposure limits. Use adequate ventilation and dust collection. Use exposure control and personal protection methods as described in Section 10.
SPILL:	Use dry clean-up methods that do not disperse dust into the air or entry into surface water. Material can be used if not contaminated. Place in an appropriate container for disposal or use. Avoid inhalation of dust and contact with skin and eyes. Use exposure control and personal protection methods as described in Section 10.
DISPOSAL:	Comply with all applicable local, state and federal regulations for disposal of unusable or contaminated materials. Dispose of packaging/containers according to local, state and federal regulations.

## 10. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>RESPIRATORY PROTECTION:</b>	Use local exhaust or general dilution ventilation to control dust levels below applicable exposure limits. Minimize dispersal of dust into the air.
	If local or general ventilation is not adequate to control dust levels below applicable exposure limits or when dust causes irritation or discomfort, use MSHA/NIOSH approved respirators.
EYE PROTECTION:	Wear safety glasses with side shields or goggles to avoid contact with the eyes. In extremely dusty environments and unpredictable environments, wear tight-fitting unvented or indirectly vented goggles to avoid eye irritation or injury. Contact lenses should not be worn when handling cement or cement containing products.
SKIN PROTECTION:	Wear impervious abrasion- and alkali-resistant gloves, boots, long-sleeved shirt, long pants or other protective clothing to prevent skin contact. Promptly remove clothing dusty with dry portland cement or clothing dampened with moisture mixed with portland cement, and launder before re-use. If contact occurs, wash areas contacted by material with pH neutral soap and water.

### 11. TRANSPORTATION DATA

Portland cement is not hazardous under U.S. DOT regulations.

## 12. TOXICOLOGICAL AND ECOLOGICAL INFORMATION

For a description of available, more detailed toxicological and ecological information, contact Lehigh White Cement Company.

## 13. OTHER REGULATORY INFORMATION

Status under US OSHA Hazard Communication Rule 29 CFR 1910.1200:	Portland cement is considered a hazardous chemical under this regulation and should be included in the employer's hazard communication program.
Status under CERCLA/Superfund, 40 CFR 117 and 302:	Not listed.
Hazard Category under SARA (Title III), Sections 311 and 312:	Portland cement qualifies as a hazardous substance with delayed health effects.
Status under SARA (Title III), Section 313:	May be subject to reporting requirements under Section 313. Contact sales office for further information.
Status under TSCA (as of May 1997):	Some substances in portland cement are on the TSCA inventory list.
Status under the Federal Hazardous Substances Act:	Portland cement is a hazardous substance subject to statutes promulgated under the subject act.

Status under California Proposition 65:

This product contains crystalline silica, a substance known to the State of California to cause cancer. This product also may contain trace amounts of heavy metals known to the State of California to cause cancer, birth defects or other reproductive harm.

### 14. OTHER INFORMATION

This MSDS provides information on various types of portland cement products. A particular product's composition may vary from sample to sample. The information provided herein is believed by Lehigh White Cement Company to be accurate at the time of preparation or prepared from sources believed to be reliable. Health and safety precautions in this data sheet may not be adequate for all individuals or situations. Users have the responsibility to comply with all laws and procedures applicable to the safe handling and use of the product, to determine the suitability of the product for its intended use, and to understand possible hazards associated with mixing portland cement with other materials. This product neither contains nor is directly manufactured with any controlled ozone depleting substances, Class I and II. SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY LEHIGH WHITE CEMENT COMPANY.

#### ABBREVIATIONS

ACGIH ASTM	American Conference of Governmental Industrial Hygienists American Society for Testing and Materials
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
$ft^3$	Cubic foot
IARC	International Agency for Research on Cancer
m <sup>3</sup>	Cubic meter
mg	Milligram
MSHA	Mine Safety and Health Administration
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average

### LEHIGH WHITE CEMENT COMPANY SALES OFFICES & TECHNICAL SERVICES:

### **NORTH REGION**

Lehigh White Cement Company 7660 Imperial Way Allentown, PA 18195 Toll Free: 800-961-5932 Tel: 610-366-4600 Fax: 610-366-4888

infonorth@lehighwhitecement.com

### SOUTHEAST REGION

Lehigh White Cement Company 3920 Pendola Point Rd. Tampa, FL 33619 Toll Free: 866-305-2427 Tel: 813-248-4000 Fax: 813-248-4005

infosoutheast@lehighwhitecement.com

### **CENTRAL REGION**

Lehigh White Cement Company 100 S. Wickson Road Waco, Texas 76712 Toll Free: 800-331-7062 Tel: 254-772-9350 Fax: 254-776-1799

infocentral@lehighwhitecement.com

### WESTERN REGION

Lehigh White Cement Company 1980 Atlanta Avenue Riverside, CA 92507 Toll Free: 800-368-7557 Tel: 951-683-7796 Fax: 951-683-7798

infowestern@lehighwhitecement.com

### HEADQUARTERS

Lehigh White Cement Company • 7660 Imperial Way • Allentown, PA 18195 Tel: 610-366-4600 • Fax: 610-366-4638

info@lehighwhitecement.com