

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015). Revision Date: 08/12/2019 Date of Issue: 10/23/2018 Supersedes Date: 07/24/2019 Version: 2.1

SECTION 1: IDENTIFICATION

1.1. **Product Identifier**

Product Form: Mixture

Product Name: 252 Silver

Product Code: 0252-0050-21 (108)

1.2. **Intended Use of the Product**

Tile Adhesive. For professional use only.

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

Company

LATICRETE International 1 Laticrete Park, N Bethany, CT 06524 T (203)-393-0010

Company LATICRETE Canada ULC PO Box 129, Emeryville, Ontario, Canada NOR-1A0 (833)-254-9255

www.laticrete.com

1.4. **Emergency Telephone Number**

Emergency Number : For Chemical Emergency call ChemTel Inc. day or night: (800)255-3924 (North America) (800)-099-0731 (Mexico) +1 (813)248-0585 (International - collect calls accepted)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classificat	ion of the Substance or Mixture	
GHS-US/CA Classification		
Skin Corr. 1C	H314	
Eye Dam. 1	H318	
Skin Sens. 1	H317	
Carc. 1A	H350	
STOT SE 3	H335	
STOT RE 1	H372	

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

2.2. Label Elements

GHS-US/CA Labeling Hazard Pictograms (GHS-US/CA)

Signal Word (GHS-US/CA)	: Danger
Hazard Statements (GHS-US/CA)	: H314 - Causes severe skin burns and eye damage.
	H317 - May cause an allergic skin reaction.
	H318 - Causes serious eye damage.
	H335 - May cause respiratory irritation.
	H350 - May cause cancer (Inhalation).
	H372 - Causes damage to organs (lungs) through prolonged or repeated exposure
	(Inhalation).
Precautionary Statements (GHS-US/CA)	: P201 - Obtain special instructions before use.
	P202 - Do not handle until all safety precautions have been read and understood.
	P260 - Do not breathe dust.
	P264 - Wash hands, forearms and face thoroughly after handling.
	P270 - Do not eat, drink or smoke when using this product.
	P271 - Use only outdoors or in a well-ventilated area.

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, and eye protection.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

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

2.3. Other Hazards

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

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

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

- Not applicable
- 3.2. Mixture

Name	Product Identifier	% *	GHS Ingredient Classification
Quartz	(CAS-No.) 14808-60-7	<= 61	Carc. 1A, H350
			STOT SE 3, H335
			STOT RE 1, H372
Cement, portland, chemicals	(CAS-No.) 65997-15-1	10 - 30	Skin Irrit. 2, H315
			Eye Dam. 1, H318
			Skin Sens. 1, H317
			STOT SE 3, H335
Calcium oxide	(CAS-No.) 1305-78-8	14 - 18	Skin Irrit. 2, H315
			Eye Dam. 1, H318
			STOT SE 3, H335
			Aquatic Acute 3, H402
Limestone	(CAS-No.) 1317-65-3	<= 9	Not classified
Silicic acid (H4SiO4), calcium salt (1:2)	(CAS-No.) 10034-77-2	0.72 - 1.2	Eye Irrit. 2A, H319
Calcium sulfate dihydrate	(CAS-No.) 13397-24-5	<= 1.2	Not classified
Magnesium oxide (MgO)	(CAS-No.) 1309-48-4	<= 0.7	Not classified
Lithium carbonate	(CAS-No.) 554-13-2	0.05	Acute Tox. 4 (Oral), H302
			Acute Tox. 4 (Inhalation:dust,mist), H332
			Eye Irrit. 2B, H320
			Aquatic Acute 2, H401
			Aquatic Chronic 2, H411
Chromium, ion (Cr6+)	(CAS-No.) 18540-29-9	< 0.00002386	Skin Sens. 1, H317
			Carc. 1B, H350
			Aquatic Acute 1, H400
			Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

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

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

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

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

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

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

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

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

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

4.2. Most Important Symptoms and Effects Both Acute and Delayed

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

Inhalation: Accelerated Silicosis can occur with exposure to high concentrations of respirable crystalline silica over a relatively short period; lung lesions can appear within five years of the initial exposure. The progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that lung lesions appear earlier and the progression is more rapid.

Acute Silicosis can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis can be fatal.

Skin Contact: Concrete may cause dry skin, discomfort, irritation, severe burns, and dermatitis. Unhardened concrete is capable of causing dermatitis by irritation and allergy. Concrete dust, in association with sweat and friction, can lead to skin irritation and dermatitis. Skin affected by dermatitis may include symptoms such as, redness, itching, rash, scaling, and cracking. Allergic contact dermatitis is caused by sensitization to hexavalent chromium (chromate) present in concrete. The reaction can range from a mild rash to severe skin ulcers.

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

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

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

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

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

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

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

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

5.2. Special Hazards Arising From the Substance or Mixture

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

Explosion Hazard: Product is not explosive.

Reactivity: Hydrofluoric acid will react with and dissolve glass, and other silica containing material. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause 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. Carbon oxides (CO, CO₂). Sulfur oxides. Calcium oxides.

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

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

6.1.1. For Non-Emergency Personnel

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

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

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

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

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

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Cautiously neutralize spilled solid. Recover the product by vacuuming, shoveling or sweeping. Minimize generation of dust. 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: May release corrosive vapors.

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

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

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

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

Incompatible Materials: Acids, ammonium salts and aluminum metal. Cement dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Cement reacts with water to form silicates and calcium hydroxide. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.

7.3. Specific End Use(s)

Tile Adhesive. For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

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

Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (respirable particulate matter)
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen
USA OSHA OSHA PEL (TWA) (mg/m ³) 50 μg/m ³ (Respirable crystalline silica)		50 μg/m ³ (Respirable crystalline silica)
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	0.05 mg/m ³ (respirable dust)

		According to the Hazardous Products Regulation (February 11, 2015).
USA IDLH	US IDLH (mg/m ³)	50 mg/m ³ (respirable dust)
Alberta	OEL TWA (mg/m³)	0.025 mg/m ³ (respirable particulate)
British Columbia	OEL TWA (mg/m³)	0.025 mg/m ³ (respirable)
Manitoba	OEL TWA (mg/m³)	0.025 mg/m ³ (respirable particulate matter)
New Brunswick	OEL TWA (mg/m³)	0.1 mg/m ³ (respirable fraction)
Newfoundland & Labrador	OEL TWA (mg/m ³)	0.025 mg/m ³ (respirable particulate matter)
Nova Scotia	OEL TWA (mg/m³)	0.025 mg/m ³ (respirable particulate matter)
Nunavut	OEL TWA (mg/m³)	0.05 mg/m ³ (respirable fraction (Silica - crystalline)
Northwest Territories	OEL TWA (mg/m³)	0.05 mg/m ³ (respirable fraction (Silica - crystalline)
Ontario	OEL TWA (mg/m ³)	0.1 mg/m ³ (designated substances regulation-respirable
		(Silica, crystalline)
Prince Edward Island	OEL TWA (mg/m ³)	0.025 mg/m ³ (respirable particulate matter)
Québec	VEMP (mg/m ³)	0.1 mg/m ³ (respirable dust)
Saskatchewan	OEL TWA (mg/m ³)	0.05 mg/m ³ (respirable fraction (Silica - crystalline
		(Trydimite removed))
Yukon	OEL TWA (mg/m³)	300 particle/mL (Silica - Quartz, crystalline)
Cement, portland, chemicals		
USA ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³ (particulate matter containing no asbestos and
		<1% crystalline silica, respirable particulate matter)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust)
		5 mg/m ³ (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m ³ (total dust)
		5 mg/m ³ (respirable dust)
USA IDLH	US IDLH (mg/m ³)	5000 mg/m ³
Alberta	OEL TWA (mg/m ³)	10 mg/m ³
British Columbia	OEL TWA (mg/m ³)	1 mg/m ³ (particulate matter containing no Asbestos and
	022	<1% Crystalline silica-respirable particulate)
Manitoba	OEL TWA (mg/m³)	1 mg/m ³ (particulate matter containing no Asbestos and
		<1% Crystalline silica, respirable particulate matter-
		particulate matter, respirable particulate matter)
New Brunswick	OEL TWA (mg/m ³)	10 mg/m ³ (particulate matter containing no Asbestos and
		<1% Crystalline silica)
Newfoundland & Labrador	OEL TWA (mg/m³)	1 mg/m ³ (particulate matter containing no Asbestos and
		<1% Crystalline silica, respirable particulate matter-
		particulate matter, respirable particulate matter)
Nova Scotia	OEL TWA (mg/m ³)	1 mg/m ³ (particulate matter containing no Asbestos and
		<1% Crystalline silica, respirable particulate matter-
		particulate matter, respirable particulate matter)
Nunavut	OEL STEL (mg/m ³)	20 mg/m ³
Nunavut	OEL TWA (mg/m³)	10 mg/m ³
Northwest Territories	OEL STEL (mg/m ³)	20 mg/m ³
Northwest Territories	OEL TWA (mg/m³)	10 mg/m ³
Ontario	OEL TWA (mg/m³)	1 mg/m ³ (containing no Asbestos and <1% Crystalline
		silica-respirable)
Prince Edward Island	OEL TWA (mg/m³)	1 mg/m ³ (particulate matter containing no Asbestos and
		<1% Crystalline silica, respirable particulate matter-
		particulate matter, respirable particulate matter)
Québec	VEMP (mg/m ³)	10 mg/m ³ (containing no Asbestos and <1% Crystalline
		silica-total dust)
		5 mg/m ³ (containing no Asbestos and <1% Crystalline
		silica-respirable dust)

		ins And According To The Hazardous Products Regulation (February 11, 2015).
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	10 mg/m ³
Yukon	OEL STEL (mg/m ³)	20 mg/m ³
Yukon	OEL TWA (mg/m³)	30 mppcf
		10 mg/m ³
Calcium oxide (1305-78-8)	1	
USA ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	2 mg/m ³
USA IDLH	US IDLH (mg/m ³)	25 mg/m ³
Alberta	OEL TWA (mg/m ³)	2 mg/m ³
British Columbia	OEL TWA (mg/m ³)	2 mg/m ³
Manitoba	OEL TWA (mg/m ³)	2 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	2 mg/m ³
Newfoundland & Labrador	OEL TWA (mg/m ³)	2 mg/m ³
Nova Scotia	OEL TWA (mg/m ³)	2 mg/m ³
Nunavut	OEL STEL (mg/m ³)	4 mg/m ³
Nunavut	OEL TWA (mg/m ³)	2 mg/m ³
Northwest Territories	OEL STEL (mg/m ³)	4 mg/m ³
Northwest Territories	OEL TWA (mg/m ³)	2 mg/m ³
Ontario	OEL TWA (mg/m ³)	2 mg/m ³
Prince Edward Island	OEL TWA (mg/m ³)	2 mg/m ³
Québec	VEMP (mg/m ³)	2 mg/m ³
Saskatchewan	OEL STEL (mg/m ³)	4 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	2 mg/m ³
Yukon	OEL STEL (mg/m ³)	4 mg/m ³
Yukon	OEL TWA (mg/m³)	2 mg/m ³
Limestone (1317-65-3)	1	T
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m ³ (total dust)
		5 mg/m ³ (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³ (total dust)
		5 mg/m ³ (respirable dust)
Alberta	OEL TWA (mg/m ³)	10 mg/m ³
British Columbia	OEL STEL (mg/m ³)	20 mg/m ³ (total)
British Columbia	OEL TWA (mg/m³)	10 mg/m ³ (total dust)
		3 mg/m ³ (respirable fraction)
New Brunswick	OEL TWA (mg/m³)	10 mg/m ³ (particulate matter containing no Asbestos and
Numerout		<1% Crystalline silica)
Nunavut	OEL STEL (mg/m ³)	20 mg/m ³
Nunavut	OEL TWA (mg/m ³)	10 mg/m ³
Northwest Territories Northwest Territories	OEL STEL (mg/m ³) OEL TWA (mg/m ³)	20 mg/m ³ 10 mg/m ³
Québec	VEMP (mg/m ³)	10 mg/m ³ (Limestone, containing no Asbestos and <1% Crystalline silica-total dust)
Sackatchowan	$OELSTEL(mg/m^3)$	20 mg/m ³
Saskatchewan Saskatchewan	OEL STEL (mg/m ³) OEL TWA (mg/m ³)	10 mg/m ³
Yukon	OEL TWA (mg/m ²) OEL STEL (mg/m ³)	20 mg/m ³
Yukon	OEL TWA (mg/m ³)	30 mppcf
IUKUII		10 mg/m ³
Coloium gulfata d'huuluut /a	2207.24.5	TO IIIR/III
Calcium sulfate dihydrate (1		10 mg/m ³ /inholokia portiouista matter (Calating and L.)
	ACGIH TWA (mg/m ³)	10 mg/m ³ (inhalable particulate matter (Calcium sulfate)
08/12/2019	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 6/14

		ions And According To The Hazardous Products Regulation (February 11, 2015).
		5 mg/m ³ (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³ (total dust)
All .		5 mg/m ³ (respirable dust)
Alberta	OEL TWA (mg/m ³)	10 mg/m ³ (Calcium sulphate)
British Columbia	OEL STEL (mg/m ³)	20 mg/m ³ (total)
British Columbia	OEL TWA (mg/m³)	10 mg/m ³ (total dust)
		3 mg/m ³ (respirable fraction)
Manitoba	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particulate matter (Calcium sulfate)
Newfoundland & Labrador	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particulate matter (Calcium sulfate)
Nova Scotia	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particulate matter (Calcium sulfate)
Ontario	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable (Calcium sulfate)
Prince Edward Island	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particulate matter (Calcium sulfate)
Québec	VEMP (mg/m ³)	10 mg/m ³ (containing no Asbestos and <1% Crystalline
		silica-total dust)
		5 mg/m ³ (containing no Asbestos and <1% Crystalline
<u> </u>		silica-respirable dust)
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	10 mg/m ³
Yukon	OEL STEL (mg/m ³)	20 mg/m ³
Yukon	OEL TWA (mg/m³)	30 mppcf
	-	10 mg/m ³
Magnesium oxide (MgO) (13		
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (inhalable particulate matter)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (fume, total particulate)
USA IDLH	US IDLH (mg/m ³)	750 mg/m ³ (fume)
Alberta	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
British Columbia	OEL STEL (mg/m ³)	10 mg/m ³ (respirable dust and fume)
British Columbia	OEL TWA (mg/m³)	10 mg/m ³ (fume, inhalable)
		3 mg/m ³ (respirable dust and fume)
Manitoba	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particulate matter)
New Brunswick	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Newfoundland & Labrador	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particulate matter)
Nova Scotia	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particulate matter)
Nunavut	OEL STEL (mg/m ³)	20 mg/m ³ (inhalable fraction)
Nunavut	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable fraction)
Northwest Territories	OEL STEL (mg/m ³)	20 mg/m ³ (inhalable fraction)
Northwest Territories	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable fraction)
Ontario	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable)
Prince Edward Island	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particulate matter)
Québec	VEMP (mg/m ³)	10 mg/m ³ (fume)
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³ (inhalable fraction)
Saskatchewan	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable fraction)
Yukon	OEL STEL (mg/m ³)	10 mg/m ³ (fume)
Yukon	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Chromium, ion (Cr6+) (1854	-	
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 μg/m³
	lassified (PNOC) (Not applicable)	
USA ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³ Respirable fraction
		10 mg/m ³ Total Dust
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³ Respirable fraction
		15 mg/m ³ Total Dust

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Alberta	OEL TWA (mg/m ³)	10 mg/m ³ (total)
		3 mg/m ³ (respirable)
British Columbia	OEL TWA (mg/m³)	10 mg/m ³ (nuisance dust-total dust)
		3 mg/m ³ (nuisance dust-respirable fraction)
Manitoba	OEL TWA (mg/m³)	10 mg/m ³ (inhalable particles, recommended)
		3 mg/m ³ (respirable particles, recommended)
New Brunswick	OEL TWA (mg/m³)	3 mg/m ³ (particulate matter containing no Asbestos and
		<1% Crystalline silica, respirable fraction)
		10 mg/m ³ (particulate matter containing no Asbestos and
		<1% Crystalline silica, inhalable fraction)
Newfoundland & Labrador	OEL TWA (mg/m³)	10 mg/m ³ (inhalable particles, recommended)
		3 mg/m ³ (respirable particles, recommended)
Nova Scotia	OEL TWA (mg/m³)	10 mg/m ³ (inhalable particles, recommended)
		3 mg/m ³ (respirable particles, recommended)
Nunavut	OEL STEL (mg/m ³)	20 mg/m ³ (insoluble or poorly soluble-inhalable fraction)
		6 mg/m ³ (insoluble or poorly soluble-respirable fraction)
Nunavut	OEL TWA (mg/m³)	10 mg/m ³ (insoluble or poorly soluble-inhalable fraction)
		3 mg/m ³ (insoluble or poorly soluble-respirable fraction)
Northwest Territories	OEL STEL (mg/m ³)	20 mg/m ³ (insoluble or poorly soluble-inhalable fraction)
		6 mg/m ³ (insoluble or poorly soluble-respirable fraction)
Northwest Territories	OEL TWA (mg/m³)	10 mg/m ³ (insoluble or poorly soluble-inhalable fraction)
		3 mg/m ³ (insoluble or poorly soluble-respirable fraction)
Ontario	OEL TWA (mg/m³)	10 mg/m ³ (inhalable)
		3 mg/m ³ (respirable)
Prince Edward Island	OEL TWA (mg/m³)	10 mg/m ³ (inhalable particles, recommended)
		3 mg/m ³ (respirable particles, recommended)
Québec	VEMP (mg/m³)	10 mg/m ³ (including dust, inert or nuisance particulates-
		total dust)
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³ (insoluble or poorly soluble-inhalable fraction)
		6 mg/m ³ (insoluble or poorly soluble-respirable fraction)
Saskatchewan	OEL TWA (mg/m³)	10 mg/m ³ (insoluble or poorly soluble-inhalable fraction)
		3 mg/m ³ (insoluble or poorly soluble-respirable fraction)

8.2. Exposure Controls

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

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



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

Hand Protection: Wear protective gloves.

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

Skin and Body Protection: Wear suitable protective clothing.

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

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Physical State	: Solid
Appearance	: White to gray powder
Odor	: None
Odor Threshold	: Not available
рН	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20°C	: Not available
Relative Density	: Not available
Specific Gravity	: 1.2 - 1.5
Solubility	: Insoluble in water.
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hydrofluoric acid will react with and dissolve glass, and other silica containing material. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause violent reaction.

10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials: Acids, ammonium salts and aluminum metal. Cement dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Cement reacts with water to form silicates and calcium hydroxide. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.

10.6. Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

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

Eye Damage/Irritation: Causes serious eye damage.

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

Germ Cell Mutagenicity: Not classified

Carcinogenicity: May cause cancer (Inhalation).

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

Reproductive Toxicity: Not classified

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

Aspiration Hazard: Not classified

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Symptoms/Injuries After Inhalation: Accelerated Silicosis can occur with exposure to high concentrations of respirable crystalline silica over a relatively short period; lung lesions can appear within five years of the initial exposure. The progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that lung lesions appear earlier and the progression is more rapid. Acute Silicosis can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis can be fatal.

Symptoms/Injuries After Skin Contact: Concrete may cause dry skin, discomfort, irritation, severe burns, and dermatitis. Unhardened concrete is capable of causing dermatitis by irritation and allergy. Concrete dust, in association with sweat and friction, can lead to skin irritation and dermatitis. Skin affected by dermatitis may include symptoms such as, redness, itching, rash, scaling, and cracking. Allergic contact dermatitis is caused by sensitization to hexavalent chromium (chromate) present in concrete. The reaction can range from a mild rash to severe skin ulcers.

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

Symptoms/Injuries After Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. **Chronic Symptoms:** Causes damage to organs through prolonged or repeated exposure. Long term exposure to respirable crystalline silica results in a significant risk of developing silicosis and other non-malignant respiratory disease, lung cancer, kidney effects, and immune system effects. May cause cancer by inhalation.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Quartz (14808-60-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg
Calcium oxide (1305-78-8)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rabbit	> 2500 mg/kg
Magnesium oxide (MgO) (1309-48-4)	
LD50 Oral Rat	3870 mg/kg
Lithium carbonate (554-13-2)	
LD50 Oral Rat	525 mg/kg
LD50 Dermal Rabbit	> 3000 mg/kg
LC50 Inhalation Rat	> 2.17 mg/l/4h
ATE US/CA (dust, mist)	1.50 mg/l/4h
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.
Chromium, ion (Cr6+) (18540-29-9)	
IARC Group	1
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
OSHA Specifically Regulated Carcinogen List	In OSHA Specifically Regulated Carcinogen list.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

Calcium oxide (1305-78-8)	
LC50 Fish 1	50.6 mg/l
Lithium carbonate (554-13-2)	
LC50 Fish 1	8.1 mg/l
Chromium, ion (Cr6+) (18540-29-9)	
LC50 Fish 1	36.2 mg/l (Exposure time: 96 h - Species: Pimephales promelas)

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

LC50 Fish 2	ish 2 7.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)	
12.2. Persistence and Degradability		
252 Silver		
Persistence and Degradability	Not established.	
12.3. Bioaccumulative Potential		
252 Silver		
Bioaccumulative Potential Not established.		
Calcium oxide (1305-78-8)		
BCF Fish 1 (no bioaccumulation)		
12.4. Mobility in Soil Not available		
12.5 Other Adverse Effects		

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

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

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

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

- 14.1. In Accordance with DOT Not regulated for transport
- 14.2. In Accordance with IMDG Not regulated for transport
- 14.3. In Accordance with IATA Not regulated for transport
- 14.4. In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

252 Silver			
SARA Section 311/312 Hazard Classes	Health hazard - Specific target organ toxicity (single or repeated		
	exposure)		
	Health hazard - Carcinogenicity		
	Health hazard - Respiratory or skin sensitization		
	Health hazard - Serious eye damage or eye irritation		
	Health hazard - Skin corrosion or Irritation		
Quartz (14808-60-7)			
Listed on the United States TSCA (Toxic Substances Conti	rol Act) inventory		
Cement, portland, chemicals (65997-15-1)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			
Calcium oxide (1305-78-8)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			
Limestone (1317-65-3)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			
Silicic acid (H4SiO4), calcium salt (1:2) (10034-77-2)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			
Magnesium oxide (MgO) (1309-48-4)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			
Lithium carbonate (554-13-2)			
Listed on the United States TSCA (Toxic Substances Conti	rol Act) inventory		
Subject to reporting requirements of United States SARA	Section 313		
SARA Section 313 - Emission Reporting	1%		

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

15.2. US State Regulations

California Proposition 65

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

Chemical Name (CAS No.)	Carcinogenicity	Developmental	Female Reproductive	Male Reproductive
		Toxicity	Toxicity	Toxicity
Quartz (14808-60-7)	Х			
Lithium carbonate (554-13-2)		Х		
Chromium, ion (Cr6+) (18540-	Х	Х		
29-9)				
Quartz (14808-60-7)				
U.S Massachusetts - Right To Kr	now List			
U.S New Jersey - Right to Know	Hazardous Substance I	List		
U.S Pennsylvania - RTK (Right to	o Know) List			
Cement, portland, chemicals (65	997-15-1)			
U.S Massachusetts - Right To Kr	now List			
U.S New Jersey - Right to Know Hazardous Substance List				
U.S Pennsylvania - RTK (Right to	o Know) List			
Calcium oxide (1305-78-8)				
U.S Massachusetts - Right To Know List				
U.S New Jersey - Right to Know Hazardous Substance List				
U.S Pennsylvania - RTK (Right to	o Know) List			
Limestone (1317-65-3)				
U.S Massachusetts - Right To Kr	now List			
U.S New Jersey - Right to Know	Hazardous Substance I	_ist		
U.S Pennsylvania - RTK (Right to	o Know) List			
Calcium sulfate dihydrate (13397	7-24-5)			
U.S New Jersey - Right to Know	Hazardous Substance I	_ist		
U.S Pennsylvania - RTK (Right to Know) List				
Magnesium oxide (MgO) (1309-4	18-4)			
U.S Massachusetts - Right To Know List				
U.S New Jersey - Right to Know Hazardous Substance List				
U.S Pennsylvania - RTK (Right to Know) List				
Lithium carbonate (554-13-2)				
U.S Massachusetts - Right To Know List				
U.S New Jersey - Right to Know	Hazardous Substance L	₋ist		
Chromium, ion (Cr6+) (18540-29-	-9)			
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List				
U.S Pennsylvania - RTK (Right to	o Know) List			
15.3. Canadian Regulation	S			
Quartz (14808-60-7)				
Listed on the Canadian DSL (Domestic Substances List)				
Cement, portland, chemicals (65	997-15-1)			
Listed on the Canadian DSL (Domestic Substances List)				
Calcium oxide (1305-78-8)				
Listed on the Canadian DSL (Dom	estic Substances List)			

Limestone (1317-65-3)

Listed on the Canadian NDSL (Non-Domestic Substances List)

Calcium sulfate dihydrate (13397-24-5)

Listed on the Canadian DSL (Domestic Substances List)

According	To Federal Register / Vol. 77, No. 58 / Monday	, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).			
Silicic	Silicic acid (H4SiO4), calcium salt (1:2) (10034-77-2)				
Listed	Listed on the Canadian DSL (Domestic Substances List)				
Magn	Magnesium oxide (MgO) (1309-48-4)				
Listed	Listed on the Canadian DSL (Domestic Substances List)				
Lithiu	m carbonate (554-13-2)				
-	on the Canadian DSL (Domestic	Substances List)			
	SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION Date of Preparation or Latest : 08/12/2019				
		: 08/12/2019			
Other	Revision • This document has been prepared in accordance with the SDS requirements of the OSH Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.				
GHS F	ull Text Phrases:				
	Acute Tox. 4	Acute toxicity (inhalation:dust,mist) Category 4			
	(Inhalation:dust,mist)				
	Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4			
	Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1			
	Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2			
	Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3			
	Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1			
	Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2			
	Carc. 1A	Carcinogenicity Category 1A			
	Carc. 1B	Carcinogenicity Category 1B			
	Eye Dam. 1	Serious eye damage/eye irritation Category 1			
	Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A			
	Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B			
	Skin Corr. 1C	Skin corrosion/irritation Category 1C			
	Skin Irrit. 2	Skin corrosion/irritation Category 2			
	Skin Sens. 1	Skin sensitization, Category 1			
	STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1			
	STOT SE 3	Specific target organ toxicity (single exposure) Category 3			
	H302	Harmful if swallowed			
	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 uninge			
	H320	Causes eye irritation			
	H332	Harmful if inhaled			
	H335	May cause respiratory irritation			
	H350	May cause cancer			
	H372	Causes damage to organs through prolonged or repeated exposure			
		Very toxic to aquatic life			
	H400				
	H401	Toxic to aquatic life			
	H402	Harmful to aquatic life			
	H410	Very toxic to aquatic life with long lasting effects			
	H411	Toxic to aquatic life with long lasting effects			

Safety Data Sheet

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. NA GHS SDS 2015 (Can, US)