

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04/16/2015 Date of issue: 04/16/2015

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Portland Cement Clinker

1.2. Intended Use of the Product

Cement clinker is produced by heating to high temperature a mixture of substances such as limestone and shale. When cement clinker is ground with a specified amount of gypsum, it will produce Portland cement or when ground with specified amounts of gypsum and other pozzolanic materials it will produce blended cements.

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

Company

Lafarge North America Inc. 8700 West Bryn Mawr Avenue, Suite 300 Chicago, IL 60631 Information: 773-372-1000 (9am to 5pm CST) email: <u>SDSinfo@Lafarge.com</u> Website: <u>www.lafarge-na.com</u>

1.4. Emergency Telephone Number

Emergency Number : 1-800-451-8346 (3E Hotline)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)	
Skin Irrit. 2 H315	
Eye Dam. 1 H318	
Skin Sens. 1 H317	
Carc. 1A H350	
STOT SE 3 H335	
Full text of H-phrases: see section 16	
2.2. Label Elements	
GHS-US Labeling	
Hazard Pictograms (GHS-US)	
	GH505 GH507 GH508
Signal Word (GHS-US)	: Danger
Hazard Statements (GHS-US)	: H315 - Causes skin irritation.
	H317 - May cause an allergic skin reaction.
	H318 - Causes serious eye damage.
	H335 - May cause respiratory irritation.
	H350 - May cause cancer.
Precautionary Statements (GHS-US)	: P201 - Obtain special instructions before use.
	P202 - Do not handle until all safety precautions have been read and understood.
	P261 - Avoid breathing dust.
	P264 - Wash hands, forearms, exposed areas thoroughly after handling.
	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, eye protection.
	P302+P352 -IF ON SKIN: Wash with plenty of water.
	P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position
	comfortable for breathing.

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P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P310 - Immediately call a POISON CENTER/doctor.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
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 waste material in accordance with all local, regional, state, national, provincial, territorial and international regulations.

2.3. Other Hazards

Individuals with lung disease (e.g. bronchitis, emphysema, COPD, pulmonary disease) can be aggravated by exposure.

2.4. Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Cement, portland, chemicals	(CAS No) 65997-15-1	100	Skin Irrit. 2, H315
			Eye Dam. 1, H318
			Skin Sens. 1, H317
			STOT SE 3, H335
Contains	Product Identifier	% (w/w)	Classification (GHS-US)
Limestone	(CAS No) 1317-65-3	0.1 - 1	Not classified
		1 - 5	
Magnesium oxide (MgO)	(CAS No) 1309-48-4	0.1 - 1	Not classified
		1 - 5	
Quartz	(CAS No) 14808-60-7	0.1 - 1	Carc. 1A, H350
			STOT SE 3, H335
			STOT RE 1, H372

Multiple WHMIS ranges have been utilized to account for varying concentration.

Full text of H-phrases: see section 16

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 if possible).
Inhalation: Move person to fresh air. Seek medical attention for discomfort or if coughing or other symptoms do not subside.
Skin Contact: Wash with cool water and a pH neutral soap or a mild skin detergent for at least 15 minutes. Seek medical attention for rash, irritation, dermatitis, and prolonged unprotected exposures to wet cement, cement mixtures or liquids from wet cement.
Eye Contact: Rinse eyes thoroughly with water for at least 60 minutes, including under lids, to remove all particles. Seek medical attention for attention for abrasions or burns.

Ingestion: Do NOT induce vomiting. Drink plenty of water. Rinse mouth. Call a POISON CENTER/doctor if you feel unwell.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Corrosive, causes burns to eyes.

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Inhalation: Breathing dust may cause nose, throat or lung irritation, including choking, depending on the degree of exposure. Inhalation of high levels of dust can cause chemical burns to the nose, throat and lungs. Risk of injury depends on duration and level of exposure. Silicosis: This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica from this product can cause silicosis, a seriously disabling and fatal lung disease. See Note to Physicians in Section 4 for further information. Carcinogenicity: Cement clinker and cement are not listed as a carcinogen by IARC or NTP; however, clinker dust and cement contains trace amounts of crystalline silica and hexavalent chromium which are classified by IARC and NTP as known human carcinogens. Autoimmune Disease: 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.

Skin Contact: Cement clinker and cement may cause dry skin, discomfort, irritation, severe burns, and dermatitis. Burns: Exposure of sufficient duration to wet cement, or to clinker dust or 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. Dermatitis: Cement and clinker dust are 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 clinker dust and 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 clinker dust or cement.

Eye Contact: Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of clinker dust, dry cement 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.

Ingestion: Ingestion of the dusts of this product may cause irritation of the mucus membranes.

Chronic Symptoms: If dust is generated, repeated exposure through inhalation may cause cancer or lung disease.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed No additional information available

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 flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Wet cement clinker and cement is caustic.

5.3. Advice for Firefighters

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

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products**: None known.

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.

6.1.1. For Non-Emergency Personnel

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

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

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6.3. Methods and Material for Containment and Cleaning Up

For Containment: Place spilled material into a container. Avoid actions that cause the cement clinker dust or cement to become airborne. Avoid inhalation of clinker dust or cement and contact with skin. Wear appropriate protective equipment as described in Section 8.

Methods for Cleaning Up: Scrape wet cement and place in container. Allow material to dry or solidify before disposal. Do not wash cement clinker or cement down sewage and drainage systems or into bodies of water (e.g. streams).

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Cutting, crushing or grinding cement clinker, hardened cement, concrete or other crystalline silica-bearing materials will release respirable crystalline silica. Use all appropriate measures of dust control or suppression, and Personal Protective Equipment (PPE) described in Section 8 below.

Handling Temperature: Unlimited

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store tightly closed in a dry, cool and well-ventilated place. Keep container closed when not in use.

7.3. Specific End Use(s)

Cement clinker is produced by heating to high temperature a mixture of substances such as limestone and shale. When cement clinker is ground with a specified amount of gypsum, it will produce Portland cement or when ground with specified amounts of gypsum and other pozzolanic materials it will produce blended cements.

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), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Cement, portland, chemical	s (65997-15-1)	
Mexico	OEL TWA (mg/m³)	10 mg/m ³
Mexico	OEL STEL (mg/m ³)	20 mg/m ³
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m ³ (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)
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/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/m³)	10 mg/m ³
British Columbia	OEL TWA (mg/m³)	10 mg/m ³ (total particulate matter containing no Asbestos and <1% Crystalline silica-total particulate)
Manitoba	OEL TWA (mg/m³)	1 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica-respirable fraction)
New Brunswick	OEL TWA (mg/m³)	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 fraction)
Nova Scotia	OEL TWA (mg/m³)	1 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica-respirable fraction)
Nunavut	OEL TWA (mg/m³)	5 mg/m ³ (respirable mass)
Northwest Territories	OEL TWA (mg/m³)	5 mg/m ³ (respirable mass)
Ontario	OEL TWA (mg/m³)	1 mg/m ³ (containing no Asbestos and <1% Crystalline silica-respirable)

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Prince Edward Island	OEL TWA (mg/m³)	1 mg/m ³ (particulate matter containing no Asbestos and
		<1% Crystalline silica-respirable fraction)
Québec	VEMP (mg/m ³)	10 mg/m ³ (containing no Asbestos and <1% Crystalline
		silica-total dust)
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	10 mg/m ³
Yukon	OEL STEL (mg/m ³)	20 mg/m ³
Yukon	OEL TWA (mg/m³)	30 mppcf
Limestone (1317-65-3)		
Mexico	OEL TWA (mg/m³)	10 mg/m ³
Mexico	OEL STEL (mg/m ³)	20 mg/m ³
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/m³)	10 mg/m ³ (total dust)
		5 mg/m ³ (respirable dust)
Alberta	OEL TWA (mg/m³)	10 mg/m ³
British Columbia	OEL STEL (mg/m³)	20 mg/m ³ (total dust)
British Columbia	OEL TWA (mg/m³)	10 mg/m ³ (total dust)
New Brunswick	OEL TWA (mg/m³)	10 mg/m ³ (particulate matter containing no Asbestos and
		<1% Crystalline silica)
Nunavut	OEL TWA (mg/m³)	5 mg/m ³ (respirable mass)
Northwest Territories	OEL TWA (mg/m³)	5 mg/m ³ (respirable mass)
Québec	VEMP (mg/m³)	10 mg/m ³ (Limestone, containing no Asbestos and <1%
		Crystalline silica-total dust)
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³
Saskatchewan	OEL TWA (mg/m³)	10 mg/m ³
Yukon	OEL STEL (mg/m ³)	20 mg/m ³
Yukon	OEL TWA (mg/m³)	30 mppcf
Magnesium oxide (MgO) (13	809-48-4)	
Mexico	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (inhalable fraction)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (fume, total particulate)
USA IDLH	US IDLH (mg/m ³)	750 mg/m ³ (fume)
Alberta	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
British Columbia	OEL STEL (mg/m ³)	10 mg/m ³ (respirable dust and fume)
British Columbia	OEL TWA (mg/m ³)	10 mg/m ³ (fume, inhalable)
Manitoba	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable fraction)
New Brunswick	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Newfoundland & Labrador	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable fraction)
Nova Scotia	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable fraction)
Nunavut	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Nunavut	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Northwest Territories	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Northwest Territories	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Ontario	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable)
Prince Edward Island	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable fraction)
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)

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Quartz (14808-60-7)		
Mexico	OEL TWA (mg/m³)	0.1 mg/m ³ (respirable fraction)
USA ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m ³ (respirable fraction)
USA OSHA	OSHA PEL (STEL) (mg/m³)	250 mppcf/%SiO ₂ +5, 10mg/m ³ /%SiO ₂ +2
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m ³ (respirable dust)
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 fraction)
New Brunswick	OEL TWA (mg/m³)	0.1 mg/m ³ (respirable fraction)
Newfoundland & Labrador	OEL TWA (mg/m³)	0.025 mg/m ³ (respirable fraction)
Nova Scotia	OEL TWA (mg/m³)	0.025 mg/m ³ (respirable fraction)
Nunavut	OEL TWA (mg/m³)	0.1 mg/m ³ (respirable mass)
Northwest Territories	OEL TWA (mg/m³)	0.1 mg/m ³ (respirable mass)
Ontario	OEL TWA (mg/m³)	0.10 mg/m ³ (designated substances regulation-respirable)
Prince Edward Island	OEL TWA (mg/m³)	0.025 mg/m ³ (respirable fraction)
Québec	VEMP (mg/m ³)	0.1 mg/m ³ (respirable dust)
Saskatchewan	OEL TWA (mg/m³)	0.05 mg/m ³ (respirable fraction)
Yukon	OEL TWA (mg/m³)	300 particle/mL

8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits. Power equipment should be equipped with proper dust collection devices.

Personal Protective Equipment: Dust formation: dust mask. In case of dust production: protective goggles. Gloves.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Protective Gloves.

Eye Protection: Wear ANSI approved glasses or safety goggles when handling dust or wet cement to prevent contact with eyes. Wearing contact lenses when using cement, under dusty conditions, is not recommended.

Skin and Body Protection: Wear gloves, boot covers and protective clothing impervious to water to prevent skin contact.

Respiratory Protection: Wear an approved respirator that is properly fitted and is in good condition when exposed to dust above exposure limits.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	:	Solid (Nodular, rock-like)
Appearance	:	Gray
Odor	:	None
Odor Threshold	:	Not available
рН	:	12 – 13 (in water)
Evaporation Rate	:	Not available
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	> 1000 °C (> 1832 °F)
Flash Point	:	Not available
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not available

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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	:	3.15
Solubility	:	Slightly (0.1 – 1.0% in water)
Partition Coefficient: N-Octanol/Water	:	Not available
Viscosity	:	Not available
Explosion Data – Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	:	Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Wet cement clinker and cement is caustic.

10.2. Chemical Stability: Stable. Keep dry until use. Avoid contact with incompatible materials.

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

10.4. Conditions to Avoid: Extremely high or low temperatures. Incompatible materials.

10.5. Incompatible Materials: Wet cement and cement clinker is alkaline and is incompatible with 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: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes skin irritation.

pH: 12 - 13

Serious Eye Damage/Irritation: Causes serious eye damage.

pH: 12 - 13

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

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: May cause cancer.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

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

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Breathing dust may cause nose, throat or lung irritation, including choking, depending on the degree of exposure. Inhalation of high levels of dust can cause chemical burns to the nose, throat and lungs. Risk of injury depends on duration and level of exposure. Silicosis: This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica from this product can cause silicosis, a seriously disabling and fatal lung disease. See Note to Physicians in Section 4 for further information. Carcinogenicity: Cement clinker and cement are not listed as a carcinogen by IARC or NTP; however, clinker dust and cement contains trace amounts of crystalline silica and hexavalent chromium which are classified by IARC and NTP as known human carcinogens. Autoimmune Disease: 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.

Symptoms/Injuries After Skin Contact: Cement clinker and cement may cause dry skin, discomfort, irritation, severe burns, and dermatitis. Burns: Exposure of sufficient duration to wet cement, or to clinker dust or 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. Dermatitis: Cement and clinker dust are

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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 clinker dust and 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 clinker dust or cement.

Symptoms/Injuries After Eye Contact: Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of clinker dust, dry cement 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:** Ingestion of the dusts of this product may cause irritation of the mucus membranes.

Chronic Symptoms: If dust is generated, repeated exposure through inhalation may cause cancer or lung disease.

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
Quartz (14808-60-7)	
IARC Group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.

SECTION 12: ECOLOGICAL INFORMATION

- 12.1. Toxicity No additional information available
- 12.2 Persistence and Degradability Not available
- 12.3. Bioaccumulative Potential Not available
- **12.4.** Mobility in Soil Not available
- 12.5. Other Adverse Effects Not available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, state, national, provincial, territorial and international regulations.

Additional Information: If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic.

SECTION 14: TRANSPORT INFORMATION

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

Portland Cement Clinker		
SARA Section 313 - Emission Reporting	This product may contain constituents listed under SARA (Title III)	
	Section 313, but not in amounts requiring supplier notification	
	under 40 CFR Part 372 Subpart C.	
Cement, portland, chemicals (65997-15-1)		
Listed on the United States TSCA (Toxic Substances Co	ontrol Act) inventory	
Limestone (1317-65-3)		
Listed on the United States TSCA (Toxic Substances Co	ontrol Act) inventory	

Magnesium oxide (MgO) (1309-48-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

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Quartz (14808-60-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State Regulations

Quartz (14808-60-7)

U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of	
	California to cause cancer.	

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

U.S. - Massachusetts - Right To Know List

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

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

Magnesium oxide (MgO) (1309-48-4)

U.S. - Massachusetts - Right To Know List

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

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

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

15.3. Canadian Regulations

Portland Cement Clinker			
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects		
	Class D Division 2 Subdivision B - Toxic material causing other toxic effects		
	Class E - Corrosive Material		
Cement, portland, chemicals	(65997-15-1)		
Listed on the Canadian DSL (D	omestic Substances List)		
Listed on the Canadian IDL (Ir	gredient Disclosure List)		
WHMIS Classification	Class E - Corrosive Material		
	Class D Division 2 Subdivision B - Toxic material causing other toxic effects		
Limestone (1317-65-3)			
Listed on the Canadian NDSL	(Non-Domestic Substances List)		
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria		
Magnesium oxide (MgO) (13	09-48-4)		
Listed on the Canadian DSL (D	omestic Substances List)		
Listed on the Canadian IDL (Ingredient Disclosure List)			
IDL Concentration 1 %			
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria		
Quartz (14808-60-7)			
Listed on the Canadian DSL (D	omestic Substances List)		
Listed on the Canadian IDL (Ingredient Disclosure List)			
IDL Concentration 1 %			
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects		

Safety Data Sheet

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

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

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

Revision Date : 04/16/2015

Other Information

· 04/10/2013

: 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 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
H315	Causes skin irritation
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

Party Responsible for the Preparation of This Document

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An electronic version of this SDS is available at: <u>www.lafarge-na.com</u> under the Sustainability and Products sections. Please direct any inquiries regarding the content of this SDS to <u>SDSinfo@Lafarge.com</u>.

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