

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).

Version: 2.0

Date of Issue: 04/21/2015 Revision Date: 05/08/2018

## **SECTION 1: IDENTIFICATION**

## **Product Identifier**

Product Form: Mixture

Product Name: Ductal® Premix Synonyms: Ductal® Premix

#### Intended Use of the Product

Ductal® Premix is an ultra-high performance material used to produce a specialized concrete used in construction. Metallic fibers (steel) or organic fibers (polyvinyl alcohol) and admixtures (superplasticizer) are added to Ductal® Premix by the end-user. Refer to metallic fiber, organic fiber and admixture vendor SDS's for specific health and safety information.

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

Company Company Lafarge US Lafarge Canada

8700 West Bryn Mawr Avenue, Suite 300

Chicago, IL 60631

Information: 773-372-1000 (9am to 5pm CST)

Email: SDSinfo@Lafarge.com Website: www.lafargeholcim.us

Eastern Canada 6509 Airport Road Mississauga, ON L4V 157 Phone: (905) 738-7070

Western Canada

#300 115 Quarry Park Road SE

Calgary, AB T2C 5G9 Phone: (403) 271-9110

Website:www.lafarge.ca

#### 1.4. **Emergency Telephone Number**

Emergency Number : Chemtrec 1-800-424-9300 (24 hours)

## **SECTION 2: HAZARDS IDENTIFICATION**

#### Classification of the Substance or Mixture 2.1.

## **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.

## **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).

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H372 - Causes damage to organs (lung/respiratory system) 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 vapors, spray, mist, dust.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P280 - Wear protective gloves, protective clothing, and eye protection.

P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

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

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

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

P310 - Immediately call a POISON CENTER or doctor.

P314 - Get medical advice/attention if you feel unwell.

P321 - Specific treatment (see Section 4 on this SDS).

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

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

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

P405 - Store locked up.

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

#### 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions. Individuals with lung disease (e.g. bronchitis, emphysema, COPD, pulmonary disease) or sensitivity to hexavalent chromium can be aggravated by exposure.

## Unknown Acute Toxicity (GHS-US/CA)

No data available

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

#### 3.2. Mixture

Name	Product Identifier	% *	GHS Ingredient Classification
Quartz	(CAS-No.) 14808-60-7	30 - 75	Carc. 1A, H350
			STOT SE 3, H335
			STOT RE 1, H372
Cement, portland, chemicals	(CAS-No.) 65997-15-1	30 - 40	Skin Irrit. 2, H315
			Eye Dam. 1, H318
			Skin Sens. 1, H317
			STOT SE 3, H335
Fumes, silica	(CAS-No.) 69012-64-2	< 15	Not classified

Full text of H-phrases: see Section 16.

## **SECTION 4: FIRST AID MEASURES**

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

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

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

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<sup>\*</sup>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%).

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**Skin Contact:** Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 60 minutes. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

**Eye Contact:** Rinse cautiously with water for at least 60 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 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. May cause cancer. Causes damage to organs through prolonged or repeated exposure.

Inhalation: Irritation of the respiratory tract and the other mucous membranes. 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.

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

**Eye Contact:** Causes permanent damage to the cornea, iris, or conjunctiva. 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. **Ingestion:** Ingestion may cause adverse effects.

Chronic Symptoms: May cause cancer. Causes damage to organs through prolonged or repeated exposure.

## 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, dry chemical, foam, carbon dioxide.

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: Silicon oxides.

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#### **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 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.

**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. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant.

#### 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:** Cutting, crushing, sanding or grinding of 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. Heavy material - proper lifting methods or equipment.

**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. Obtain special instructions before use.

**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 away from incompatible materials. 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)

Ductal® Premix is an ultra-high performance material used to produce a specialized concrete used in construction. Metallic fibers (steel) or organic fibers (polyvinyl alcohol) and admixtures (superplasticizer) are added to Ductal® Premix by the end-user. Refer to metallic fiber, organic fiber and admixture vendor SDS's for specific health and safety information.

## 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), Canadian provincial governments, or the Mexican government.

Quartz (14808-60-7)		
Mexico	OEL TWA (mg/m³)	0.1 mg/m³ (respirable fraction)
USA ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³ (respirable particulate matter)
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen

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USA OSHA	OSHA PEL (TWA) (mg/m³)	50 μg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m³ (respirable dust)
USA IDLH	US IDLH (mg/m³)	50 mg/m³ (respirable dust)
Alberta	OEL TWA (mg/m³)	0.025 mg/m³ (respirable particulate)
British Columbia	OEL TWA (mg/m³)	0.025 mg/m³ (respirable)
Manitoba	OEL TWA (mg/m³)	0.025 mg/m³ (respirable particulate matter)
New Brunswick	OEL TWA (mg/m³)	0.1 mg/m³ (respirable fraction)
Newfoundland & Labrador	OEL TWA (mg/m³)	0.025 mg/m³ (respirable particulate matter)
Nova Scotia	OEL TWA (mg/m³)	0.025 mg/m³ (respirable particulate matter)
Nunavut	OEL TWA (mg/m³)	0.05 mg/m³ (respirable fraction)
Northwest Territories	OEL TWA (mg/m³)	0.05 mg/m³ (respirable fraction)
Ontario	OEL TWA (mg/m³)	0.1 mg/m³ (designated substances regulation-respirable)
Prince Edward Island	OEL TWA (mg/m³)	0.025 mg/m³ (respirable particulate matter)
Québec	VEMP (mg/m³)	0.1 mg/m³ (respirable dust)
Saskatchewan	OEL TWA (mg/m³)	0.05 mg/m³ (respirable fraction)
Yukon	OEL TWA (mg/m³)	300 particle/mL
Cement, portland, chemical	, , ,	· · ·
Mexico	OEL TWA (mg/m³)	10 mg/m³
Mexico	OEL STEL (mg/m³)	20 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m³ (particulate matter containing no asbestos and
JUA ACGIII	Acom (WA (IIIB/III )	<1% crystalline silica, respirable particulate matter)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust)
OJA OJITA	OSHAFEE (TWA) (IIIg/III )	5 mg/m³ (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (total dust)
OSA NIOSII	WOSH KEE (TWA) (IIIg/III )	5 mg/m³ (respirable dust)
USA IDLH	US IDLH (mg/m³)	5000 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m³)	10 mg/m³
British Columbia	OEL TWA (IIIg/III ) OEL TWA (mg/m³)	1 mg/m³ (particulate matter containing no Asbestos and
British Columbia	OLL TWA (IIIg/III )	<1% Crystalline silica-respirable particulate)
Manitoba	OEL TWA (mg/m³)	1 mg/m³ (particulate matter containing no Asbestos and
I Wallitoba	OLL TWA (IIIg/III )	<1% Crystalline silica-respirable particulate matter)
New Brunswick	OEL TWA (mg/m³)	10 mg/m³ (particulate matter containing no Asbestos and
New Branswick	OLL TWA (IIIg/III )	<1% Crystalline silica)
Newfoundland & Labrador	OFI TWA (mg/m³)	1 mg/m³ (particulate matter containing no Asbestos and
	522 (W/(mg/m/)	<1% Crystalline silica-respirable particulate matter)
Nova Scotia	OEL TWA (mg/m³)	1 mg/m³ (particulate matter containing no Asbestos and
	522 (W/(mg/m/)	<1% Crystalline silica-respirable particulate matter)
Nunavut	OEL STEL (mg/m³)	20 mg/m <sup>3</sup>
Nunavut	OEL TWA (mg/m³)	10 mg/m <sup>3</sup>
Northwest Territories	OEL STEL (mg/m³)	20 mg/m³
Northwest Territories	OEL TWA (mg/m³)	10 mg/m <sup>3</sup>
Ontario	OEL TWA (IIIg/III ) OEL TWA (mg/m³)	1 mg/m³ (containing no Asbestos and <1% Crystalline
Citatio	OLL TWA (IIIg/III )	silica-respirable)
Prince Edward Island	OEL TWA (mg/m³)	1 mg/m³ (particulate matter containing no Asbestos and
Fillice Euwaru Islaliu	OLL TWA (IIIg/III )	<1% Crystalline silica-respirable particulate matter)
Québec	VEMP (mg/m³)	10 mg/m³ (containing no Asbestos and <1% Crystalline
Quenec	VEIVIT (IIIB/III )	silica-total dust)
		5 mg/m³ (containing no Asbestos and <1% Crystalline
		silica-respirable dust)
Saskatchewan	OEL STEL (mg/m³)	20 mg/m <sup>3</sup>
Saskatchewan	OEL TWA (mg/m³)	10 mg/m <sup>3</sup>
Saskattnewan	DEL I WA (IIIB/III-)	TO HIR/III

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Yukon	OEL STEL (mg/m³)	20 mg/m <sup>3</sup>
Yukon	OEL TWA (mg/m³)	30 mppcf
		10 mg/m³
Fumes, silica (69012-64-2)		
Mexico	OEL TWA (mg/m³)	2 mg/m³
		10 mg/m³ (inhalable particulate)
		3 mg/m³ (respirable particulate)
British Columbia	OEL TWA (mg/m³)	4 mg/m³ (total dust)
		1.5 mg/m³ (respirable dust)
New Brunswick	OEL TWA (mg/m³)	2 mg/m³ (respirable fraction)
Nunavut	OEL TWA (mg/m³)	2 mg/m³ (respirable fraction)
Northwest Territories	OEL TWA (mg/m³)	2 mg/m³ (respirable fraction)
Ontario	OEL TWA (mg/m³)	2 mg/m³ (respirable)
Québec	VEMP (mg/m³)	2 mg/m³ (containing no Asbestos and <1% Crystalline
		silica-respirable dust)
Saskatchewan	OEL TWA (mg/m³)	2 mg/m³ (respirable fraction)

## 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. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

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









Materials for Protective Clothing: Chemically resistant materials and fabrics.

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 should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

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

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1. Information on Basic Physical and Chemical Properties

Physical State : Solid

**Appearance** : Gray or White Powder

Odor : None

Odor Threshold: Not availablepH: 12 - 13 (In Water)Evaporation Rate: Not availableMelting Point: Not availableFreezing Point: Not available

**Boiling Point** : > 1000 °C (> 1832 °F)

Flash Point: Not availableAuto-ignition Temperature: Not availableDecomposition Temperature: Not availableFlammability (solid, gas): Not availableLower Flammable Limit: Not availableUpper Flammable Limit: Not available

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Vapor Pressure: Not availableRelative Vapor Density at 20°C: Not availableSpecific Gravity: 3.0 - 3.2 (Water = 1)Solubility: Water: Slightly (0.1 - 1.0%)

Partition Coefficient: N-Octanol/Water : Not available Viscosity : Not 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: 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: None expected under normal conditions of use.

## **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.

**pH:** 12 - 13 (In Water)

Eye Damage/Irritation: Causes serious eye damage.

pH: 12 - 13 (In Water)

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 (lung/respiratory system) through prolonged or repeated exposure (Inhalation).

Reproductive Toxicity: Not classified

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

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Irritation of the respiratory tract and the other mucous membranes. 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.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction. Concrete may cause dry skin, discomfort, irritation, severe burns, and dermatitis. Exposure of sufficient duration to wet concrete can cause serious, potentially irreversible damage to skin, eye, respiratory and digestive tracts due to chemical (caustic) burns, including third degree burns. A skin exposure may be hazardous even if there is no pain or discomfort. Unhardened concrete is capable of causing dermatitis by irritation and allergy. Skin affected by dermatitis may include symptoms such as, redness, itching, rash, scaling, and cracking. Irritant dermatitis is caused by the physical properties of concrete including alkalinity and abrasion.

Allergic contact dermatitis is caused by sensitization to hexavalent chromium (chromate) present in concrete. The reaction can range

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from a mild rash to severe skin ulcers. Persons already sensitized may react to the first contact with wet concrete. Others may develop allergic dermatitis after years of repeated contact with wet concrete.

**Symptoms/Injuries After Eye Contact:** Causes permanent damage to the cornea, iris, or conjunctiva. 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:** Ingestion may cause adverse effects.

Chronic Symptoms: May cause cancer. Causes damage to organs through prolonged or repeated exposure.

## 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.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

## **SECTION 12: ECOLOGICAL INFORMATION**

## 12.1. Toxicity

Ecology - General: Not classified.

## 12.2. Persistence and Degradability

Ductal® Premix	
Persistence and Degradability	Not established.

## 12.3. Bioaccumulative Potential

Ductal® Premix	
<b>Bioaccumulative Potential</b>	Not established.

## 12.4. Mobility in Soil

Not available

#### 12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

## 13.1. Waste treatment methods

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

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

Ecology - Waste Materials: Avoid release to the environment.

## **SECTION 14: TRANSPORT INFORMATION**

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

**14.1. In Accordance with DOT** Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

14.4. In Accordance with TDG Not regulated for transport

## **SECTION 15: REGULATORY INFORMATION**

## 15.1. US Federal Regulations

Ductal® Premix	
SARA Section 311/312 Hazard Classes	Health hazard - Specific target organ toxicity (single or repeated exposure)
	Health hazard - Serious eye damage or eye irritation

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	Health hazard - Acute toxicity (any route of exposure) Health hazard - Carcinogenicity Health hazard - Respiratory or skin sensitization	
Quartz (14808-60-7)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Cement, portland, chemicals (65997-15-1)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Fumes, silica (69012-64-2)		
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.

## 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

## 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

## Fumes, silica (69012-64-2)

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

## 15.3. Canadian Regulations

## Quartz (14808-60-7)

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

## Fumes, silica (69012-64-2)

Listed on the Canadian DSL (Domestic Substances List)

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

**Date of Preparation or Latest** 

: 05/08/2018

Revision

**Other Information** 

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

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

Carc. 1A	Carcinogenicity Category 1A
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage

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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).

H335	May cause respiratory irritation
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure

An electronic version of this SDS is available: for Canada on <a href="www.lafarqe.ca">www.lafarqe.ca</a> under the Health and Safety Section, and for US on <a href="www.lafarqeholcim.us">www.lafarqeholcim.us</a> under the Our Solutions and Products Section. Please direct any inquiries regarding the content of this SDS to <a href="mailto:SDSinfo@Lafarqe.com">SDSinfo@Lafarqe.com</a>.

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