

# SAFETY DATA SHEET

## Argos Ready Mix Concrete (Concrete)



### 1. IDENTIFICATION

Product Identifier      Ready Mix Concrete (Concrete)

Synonyms:              Ready Mix Concrete, Concrete Ready Mix, Portland Cement Concrete, Ready Mix Stucco, Ready Mix grout, Ready Mix, Concrete, Freshly Mixed Concrete, Colloidal Concrete, Permeable Concrete, Shotcrete, Gunitite, Polymer-Portland Cement Concrete, Colored Concrete, Flowable Fill, Roller-Compacted Concrete, Fiber Reinforced Concrete. Includes Florida Super n Sand Stucco Mix and Florida Super n Sand Masonry Mortar Mix.

Intended use of the product:      Cement is used as a binder in concrete and mortars that are widely used in construction. Cement is distributed in bags, totes and bulk shipment.

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### 2. HAZARD IDENTIFICATION

According to OSHA 29 CFR 1910.1200 HCS

#### Classification of the Substance or Mixture

Classification (GHS-US):

Skin Corrosion/Irritation	Category 1C	H314
Skin Sensitization	Category 1	H317
Serious Eye Damage/Eye Irritation	Category 1	H318
STOT SE	Category 3	H335
Carcinogenicity	Category 1A	H350
STOT RE	Category 1	H372

#### Labeling Elements



Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US):

- H314 – Causes severe skin burns and eye damage.
- H317 – May cause an allergic skin reaction.
- H318 – Causes serious eye damage.
- H335 – May cause respiratory irritation.
- H350 – May cause cancer.
- H372 – Causes damage to lung through prolonged or repeated exposure inhalation.

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Precautionary Statements (GHS-US) :

Prevention	<p>P201 - Obtain special instructions before use.</p> <p>P202 - Do not handle until all safety precautions have been read and understood.</p> <p>P260 - Do not breathe dust/fume/gas/mist/vapors/spray.</p> <p>P264- Wash thoroughly after handling.</p> <p>P270 – Do not eat, drink or smoke when using this product.</p> <p>P271 – Use only outdoors or in a well-ventilated area.</p> <p>P272 - Contaminated work clothing should not be allowed out of the workplace.</p> <p>P280 – Wear protective gloves.</p>
Response	<p>P301+P330+P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P303+P361+P353 – IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P308+P313 - If exposed or concerned: Get medical attention/advice.</p> <p>P310 – Immediately call a POISON CENTER/Doctor.</p> <p>P333+P313 - If skin irritation or a rash occurs: Get medical advice/attention.</p> <p>P363 – Wash contaminated clothing before reuse.</p>
Storage	P403+P233 – Store in a well-ventilated place. Keep container tightly closed.
Disposal	P501- Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards Not Otherwise Classified: None

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### Chemical Composition Information

Name	Product Identifier (Cas#)	% (w/w)	Classification
Limestone	1317-65-3	20-65	Not Classified
Quartz	14808-60-7	0-90	Carcinogenicity 1A, H350 STOT RE 1, H372
Calcium Hydroxide	1305-62-0	15-25	Skin Irritant 2, H315 Serious Damage Eye 1, H318
Portland Cement	65997-15-1	10-30	Skin Corrosive 1C, H314 Serious Damage Eye 1, H318 Skin Sensitization 1, H317 STOT SE 3, H335
Fly Ash	68131-74-8	0-20	Not Classified
Calcium Oxide	1305-78-8	0-5	Skin Corrosive 1, H314 Serious Damage Eye 1, H318 STOT SE 3, H335
Magnesium oxide	1309-48-4	0-4	Skin Irritant 3 H316 Eye Irritant 2, H320 STOT SE 3, H335
Calcium sulfate dihydrate	133397-24-5	0-2	Not Classified

The exact percentage (concentration) of the composition has been withheld as proprietary.

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### 4. FIRST AID MEASURES

Route	Measures
Inhalation	Inhalation of wet product not foreseeable route of exposure. If dust from the material is inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. If the individual is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Inhalation of large amounts of Portland cement requires immediate medical attention. Call a poison center or physician.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth with water and afterwards drink plenty of water. Get immediate medical attention.
Eye Contact	In case of contact get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 30 minutes. Chemical burns must be treated promptly by a physician.
Skin Contact	Wash off with plenty of water. Remove contaminated clothing and shoes. Launder contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Absorption	As with skin contact, remove contaminated clothing and flush with copious amounts of water. Flush affected area for at least 15 minutes to minimize potential for further absorption. Seek medical attention if significant portions of skin have been exposed.

#### Most Important Symptoms

May cause skin burns. May cause serious eye damage. May cause allergic skin reaction. Carcinogen; breathing crystalline silica can cause lung disease, including silicosis and lung cancer. Crystalline silica has also been associated with scleroderma and kidney disease. May cause respiratory irritation. May cause damage to lung through prolonged repeated exposure.

#### Indication of any immediate medical attention and special treatment needed

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

### 5. FIRE-FIGHTING MEASURES

#### Flammable Properties

This product is not flammable or combustible.

#### Extinguishing Media

Use an extinguishing agent suitable for the surrounding fire.

#### Specific Hazards / Products of Combustion

No specific fire or explosion hazard.

#### Special Precautions and Protective Equipment for Firefighters

Move containers from fire area if this can be done without risk. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

See Section 9 for fire properties of this chemical including flash point, autoignition temperature, and explosive limits

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal Precautions

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 for additional information.

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### Environmental Precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if reportable thresholds have entered the environment, including waterways, soil or air. Materials can enter waterways through drainage systems.

### Containment and Clean-Up Methods

Scrape wet cement and place in container. Allow material to dry or solidify before disposal. Do not wash down sewage or drainage systems or into bodies of water.

## 7. HANDLING AND STORAGE

### Handling Precautions

Avoid contact with eyes, skin, or clothing. This product contains quartz, which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposure below recommended exposure limits. Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure by obtaining and following special instructions before use. Do not handle until all safety precautions have been read and understood. Keep in the original container or an approved alternative made from a compatible material and keep the container tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

### Storage

Use care in handling/storage. Store in tightly closed original container in a well-ventilated place. Keep away from food, drink and animal feeding stuffs. Store in accordance with local/regional/national/international regulation. Keep out of reach of children.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational Exposure Limits

#### US. ACGIH Threshold Limit Values

##### Components Type Value Form

Calcium Hydroxide: TWA 5 mg/m<sup>3</sup>

(CAS# 1305-62-0)

Calcium oxide: TWA 2 mg/m<sup>3</sup>

(CAS# 1305-78-8)

Calcium sulfate dihydrate: TWA 10 mg/m<sup>3</sup> Inhalable fraction.

(CAS# 13397-24-5)

Magnesium oxide: TWA 10 mg/m<sup>3</sup> Inhalable fraction.

(CAS# 1309-48-4)

Portland cement TWA 1 mg/m<sup>3</sup> Respirable fraction.

(CAS# 65997-15-1)

Quartz: TWA 0.025 mg/m<sup>3</sup> Respirable fraction.

(CAS# 14808-60-7)

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

##### Components Type Value Form

Calcium Hydroxide: PEL 5 mg/m<sup>3</sup> Respirable fraction.

(CAS# 1305-62-0)

Calcium oxide: PEL 5 mg/m<sup>3</sup>

(CAS# 1305-78-8)

Calcium sulfate dihydrate: PEL 5 mg/m<sup>3</sup> Respirable fraction 15 mg/m<sup>3</sup> Total dust.

(CAS# 13397-24-5)

Limestone: PEL 5 mg/m<sup>3</sup> Respirable fraction 15 mg/m<sup>3</sup> Total dust.

(CAS# 1317-65-3)

Magnesium oxide: PEL 15 mg/m<sup>3</sup> Total particulate.

(CAS# 1309-48-4)

Portland cement: PEL 5 mg/m<sup>3</sup> Respirable fraction 15 mg/m<sup>3</sup> Total dust.

(CAS# 65997-15-1)

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### US. OSHA Table Z-3 (29 CFR 1910.1000)

#### Components Type Value Form

Portland cement: TWA 50 mppcf

(CAS# 65997-15-1)

Quartz: TWA 0.3 mg/m<sup>3</sup> Total dust, 0.1 mg/m<sup>3</sup> Respirable, 2.4 mppcf Respirable.

(CAS# 14808-60-7)

### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

#### Components Type Value Form

Calcium Hydroxide: TWA 5 mg/m<sup>3</sup>

(CAS# 1305-62-0)

Calcium oxide: TWA 2 mg/m<sup>3</sup>

(CAS# 1305-78-8)

Calcium sulfate dihydrate: TWA 10 mg/m<sup>3</sup>

(CAS# 13397-24-5)

Limestone: TWA 10 mg/m<sup>3</sup>

(CAS# 1317-65-3)

Magnesium oxide: TWA 10 mg/m<sup>3</sup> Fume.

(CAS# 1309-48-4)

Portland cement: TWA 10 mg/m<sup>3</sup>

(CAS# 65997-15-1)

Quartz: TWA 0.025 mg/m<sup>3</sup> Respirable particles.

(CAS# 14808-60-7)

### Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

#### Components Type Value Form

Calcium Hydroxide: TWA 5 mg/m<sup>3</sup>

(CAS# 1305-62-0)

Calcium oxide: TWA 2 mg/m<sup>3</sup>

(CAS# 1305-78-8)

Calcium sulfate dihydrate: STEL 20 mg/m<sup>3</sup> Total dust, TWA 10 mg/m<sup>3</sup> Inhalable

(CAS# 13397-24-5)

Limestone: STEL 20 mg/m<sup>3</sup> Total dust, TWA 3 mg/m<sup>3</sup> Respirable fraction 10 mg/m<sup>3</sup> Total dust.

(CAS# 1317-65-3)

Magnesium oxide: STEL 10 mg/m<sup>3</sup> Respirable dust and/or fume, TWA 3 mg/m<sup>3</sup> Respirable dust and/or fume, 10 mg/m<sup>3</sup> Inhalable fume.

(CAS# 1309-48-4)

Portland cement: TWA 3 mg/m<sup>3</sup> Respirable fraction, 10 mg/m<sup>3</sup> Total dust.

(CAS# 65997-15-1)

Quartz TWA 0.025 mg/m<sup>3</sup> Respirable fraction.

(CAS# 14808-60-7)

### Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

#### Components Type Value Form

Calcium Hydroxide: TWA 5 mg/m<sup>3</sup>

(CAS# 1305-62-0)

Calcium oxide: TWA 2 mg/m<sup>3</sup>

(CAS# 1305-78-8)

Calcium sulfate dihydrate: TWA 10 mg/m<sup>3</sup> Inhalable fraction.

(CAS# 13397-24-5)

Magnesium oxide: TWA 10 mg/m<sup>3</sup> Inhalable fraction.

(CAS# 1309-48-4)

Portland cement: TWA 10 mg/m<sup>3</sup>

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(CAS# 65997-15-1)  
Quartz: TWA 0.1 mg/m<sup>3</sup> Respirable.  
(CAS# 14808-60-7)

### Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

#### Components Type Value Form

Calcium Hydroxide: TWA 5 mg/m<sup>3</sup>  
(CAS# 1305-62-0)  
Calcium oxide: TWA 2 mg/m<sup>3</sup>  
(CAS# 1305-78-8)  
Calcium sulfate dihydrate: TWA 5 mg/m<sup>3</sup> Respirable dust, 10 mg/m<sup>3</sup> Total dust.  
(CAS# 13397-24-5)  
Limestone: TWA 10 mg/m<sup>3</sup> Total dust.  
(CAS# 1317-65-3)  
Magnesium oxide: TWA 10 mg/m<sup>3</sup> Fume.  
(CAS# 1309-48-4)  
Portland cement: TWA 5 mg/m<sup>3</sup> Respirable dust, 10 mg/m<sup>3</sup> Total dust.  
(CAS# 65997-15-1)  
Quartz: TWA 0.1 mg/m<sup>3</sup> Respirable dust.  
(CAS# 14808-60-7)

### Mexico. Occupational Exposure Limit Values

#### Components Type Value Form

Calcium Hydroxide: TWA 5 mg/m<sup>3</sup>  
(CAS# 1305-62-0)  
Calcium oxide: TWA 2 mg/m<sup>3</sup>  
(CAS# 1305-78-8)  
Calcium sulfate dihydrate: TWA 10 mg/m<sup>3</sup>  
(CAS# 13397-24-5)  
Limestone: STEL 20 mg/m<sup>3</sup>, TWA 10 mg/m<sup>3</sup>  
(CAS# 1317-65-3)  
Magnesium oxide: TWA 10 mg/m<sup>3</sup> Fume.  
(CAS# 1309-48-4)  
Portland cement: STEL 20 mg/m<sup>3</sup>, TWA 10 mg/m<sup>3</sup>  
(CAS# 65997-15-1)  
Quartz: TWA 0.1 mg/m<sup>3</sup>  
(CAS# 14808-60-7)

### Engineering Controls

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

### Personal Protective Equipment

Exposure	Equipment
Eye / Face	To prevent eye contact, wear safety glasses with side shields, safety goggles or face shields when handling wet cement. Contact lenses should not be worn when working with cement or cement products.
Skin	Wear chemical-resistant gloves, footwear and protective clothing appropriate for risk of exposure. Contact glove manufacturer for specific information. Do not rely on barrier crèmes; barrier crèmes should

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Respiratory	not be used in place of gloves. Avoid tasks which cause dust to become airborne. Use local or general ventilation to control exposure below applicable exposure limits. Use NIOSH/MSHA approved (30 CFR 11) or NIOSH approved (42 CFR 84) respirators in poorly ventilated areas, or if an applicable exposure limit is exceeded, or when dust causes discomfort or irritation.
General Hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value	Comments
Appearance	Semi-fluid, flowable, granular paste	
Physical State	Fluid	
Odor	Odorless	
Odor Threshold	Not available	
pH	12-13 in water	
Melting / Freeze Point	Not available	
Boiling Point And Range	Not available	
Flash Point	Not flammable. Not combustible.	
Evaporation Rate	Not available	
Flammability	Not available	
Flammability Limits	Not available	
Vapor Pressure	Not available	
Vapor Density	Not available	
Specific Gravity	1.9-2.4	
Solubility	Slight (0.1-1%)	
Partition Coefficient	Not available	
Autoignition Temperature	Not available	
Decomposition Temperature	Not available	
Viscosity	Varies	
Percent Volatiles	Not available	

### 10. STABILITY AND REACTIVITY

#### Reactivity

Not expected to be reactive.

#### Stability

The product is stable under normal conditions of use, storage and transport.

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### Reactions / Polymerization

Not expected to occur.

### Conditions to Avoid

Contact with incompatible materials. When exposed to air it will absorb carbon dioxide to form calcium carbonate and magnesium oxide. When heated at temperatures above 580 deg. C, it loses water to form calcium oxide, magnesium oxide and water.

### Incompatible Materials

Wet material is alkaline and will react with acids, ammonium salts, aluminum and other reactive metals. Hardened material is attacked by hydrofluoric acid releasing toxic silicon tetrafluoride gas.

### Hazardous Decomposition Products

None expected under normal conditions of use.

## 11. TOXICOLOGICAL INFORMATION

**Acute effects:** Causes skin, eye and digestive tract burns.

### Acute Toxicity (Inhalation LC50)

Portland cement (CAS# 65997-15-1): >1 mg/L (rat, 4hr)  
Limestone (CAS# 1317-65-3): LC50 > 3 mg/L (rat, 4 hr) (Similar substance)  
Calcium Hydroxide (CAS# 1305-62-0): No data available  
Calcium Sulfate dehydrate (CAS# 13397-24-5): LC50 > 3.26 mg/L air (inhalation, dust, 4 h)  
Magnesium Oxide (CAS# 1309-48-4): No data available.  
Quartz (CAS# 14808-60-7): No data available.  
Fly Ash (CAS# 68131-74-8): LC50 5.38 mg/L (rat, 4 hr) (fluidized Bed Combustion Fly Ash)  
Calcium Oxide (CAS# 1305-78-8): No data available

### Acute Toxicity (Oral LC50)

Portland cement (CAS# 65997-15-1): No data available.  
Limestone (CAS# 1317-65-3): LD50 6450 mg/kg (rat) (similar substance)  
Calcium Hydroxide (CAS# 1305-62-0): LD50 7340 mg/kg (rat)  
Calcium Sulfate dehydrate (CAS# 13397-24-5): LD50 > 2000 mg/kg (rat)  
Magnesium Oxide (CAS# 1309-48-4): LD50 3870 mg/kg (rat)  
Quartz (CAS# 14808-60-7): LD50 500 mg/kg (rat)  
Fly Ash: No data available.  
Calcium Oxide (CAS# 1305-78-8): LD50 > 2000 mg/kg (rat)

### Acute Toxicity (Dermal LC50)

Portland cement (CAS# 65997-15-1): No data available  
Limestone (CAS# 1317-65-3): LD50 > 2000 mg/kg (Similar substance)  
Calcium Hydroxide (CAS# 1305-62-0): LD50 > 2500 mg/kg  
Calcium Sulfate dehydrate (CAS# 13397-24-5): No data available.  
Magnesium Oxide (CAS# 1309-48-4): No data available  
Quartz (CAS# 14808-60-7): No data available.  
Fly Ash (CAS# 68131-74-8): LD50 > 2000 mg/kg (Rabbit)  
Calcium Oxide (CAS# 1305-78-8): No data available.

**Skin Corrosion/Irritation:** May cause skin irritation. May cause serious burns in the presence of moisture.

**Serious Eye Damage/Irritation:** Causes serious eye damage. May cause burns in the presence of moisture.

**Respiratory or Skin Sensitization:** May cause respiratory tract irritation. The product may contain chromates, which may cause an allergic skin sensitization reaction.



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**Germ Cell Mutagenicity:** No data available.

**Carcinogenicity:** Cement may contain trace amounts of respirable crystalline silica and hexavalent chromium which are classified by NTP and IARC as known human carcinogens.

### ACGIH Carcinogens

Magnesium oxide (CAS# 1309-48-4): A4 Not classifiable as a human carcinogen.

Portland cement (CAS# 65997-15-1): A4 Not classifiable as a human carcinogen

Quartz (CAS# 14808-60-7): A2 Suspected human carcinogen.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Quartz (CAS# 14808-60-7): 1 Carcinogenic to humans.

### US NTP Report on Carcinogens: Known carcinogen

Quartz (CAS# 14808-60-7): Known To Be Human Carcinogen.

### US OSHA Specifically Regulated Substances: Cancer hazard

No data available.

**Teratogenicity:** No data available

**Specific Target Organ Toxicity (Repeated Exposure):** Quartz (CAS #14808-60-7): Category 1, route of exposure: inhalation, target organs: respiratory tract and organs.

**Specific Target Organ Toxicity (Single Exposure):** Calcium oxide, Magnesium oxide, Portland cement; Category 3, route of exposure: inhalation and skin contact, target organs: Respiratory tract irritation, skin irritation.

**Aspiration Hazard:** No data available.

**Potential Health Effects:** Causes serious eye damage. May cause respiratory irritation. Causes severe burns. May cause an allergic skin reaction.

**Chronic effects:** Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. Danger of serious damage to health by prolonged exposure.

Crystalline silica is considered a hazard by inhalation. IARC has classified crystalline silica as a Group 1 substance, carcinogenic to humans. This classification is based on the findings of laboratory animal studies (inhalation and implantation) and epidemiology studies that were considered sufficient for carcinogenicity. Excessive exposure to crystalline silica can cause silicosis, a non-cancerous lung disease. Portland cement (CAS# 65997-15-1): is not classifiable as a human carcinogen.

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

## 12. ECOLOGICAL INFORMATION

### Toxicity:

Data for Mixture: Ready Mix Concrete (Concrete) (CAS# Mixture)

Aquatic Toxicity- Acute Crustacea EC50 Daphnia 350 mg/l, 48 hours, estimated

Fish LC50 Fish 703.9267 mg/l, 96 hours, estimated

Data for Component: Calcium Hydroxide (CAS# #1305-62-0)

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Aquatic Toxicity-Acute	Gasterosteus aculeatus 96 hr LC50 = 457 mg/L Oncorhynchus mykiss 96 hr LC50 = 50.6 mg/L Crangon septemspinosa 96 hr LC50 = 158 mg/L Daphnia magna 48 hr EC50 = 49.1 mg/L Daphnia magna 48 h EC50 > 100 mg/L Danio rerio 96 h LC50 > 11.1 mg/L
Aquatic Toxicity-Chronic	Crangon septemspinosa 14 d NOEC = 32 mg/L
Data for Component: Aquatic Toxicity-Acute	Calcium sulfate dihydrate (CAS# 13397-24-5) Fish LC50 Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
Data for Component: Aquatic Toxicity-Acute	Calcium oxide (CAS#1305-78-8) Cyprinus carpio 96 hr LC50 = 1070 mg/L
Aquatic Toxicity-Chronic	Tilapia nilotica 46 days NOEC = 100 mg/L
Data for Component: Aquatic Toxicity- Acute	Quartz (CAS# 14808-60-7) Daphnia magna 24 hr LL50 > 10000 mg/L Danio rerio 96 hr LL0 = 10000 mg/L Daphnia magna 48 hr EC50 > 100 mg/L (similar substance) Desmodesmus subspicatus 72 hr EC50 > 14 mg/L (similar substance)

**Persistence and Degradation:** Persistent  
**Bioaccumulative Potential:** Not Bioaccumulative  
**Mobility in Soil:** No data available.  
**Other Adverse Effects:** No data available.  
**Other Information:** No data available.

### 13. DISPOSAL CONSIDERATIONS

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

### 14. TRANSPORT INFORMATION

#### US DOT

UN Identification Number	Not regulated
Proper Shipping Name	Not available
Hazard Class and Packing Group	Not available
Shipping Label	Not available
Placard / Bulk Package	Not available
Emergency Response Guidebook Guide Number	Not available

#### IATA Cargo

UN Identification Number	Not regulated
Shipping Name / Description	Not available
Hazard Class and Packing Group	Not available
ICAO Label	Not available
Packing Instructions Cargo	Not available
Max Quantity Per Package Cargo	Not available

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### IATA Passenger

UN Identification Number	Not regulated
Shipping Name / Description	Not available
Hazard Class and Packing Group	Not available
ICAO Label	Not available
Packing Instructions Passenger	Not available
Max Quantity Per Package	Not available

### IMDG

UN Identification Number	Not regulated
Shipping Name / Description	Not available
Hazard Class and Packing Group	Not available
IMDG Label	Not available
EmS Number	Not available
Marine Pollutant	Not available

## 15. REGULATORY INFORMATION

### OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### U.S. Federal, State, and Local Regulatory Information

#### U.S. Toxic Substances Control Act

All components are on the U.S. EPA TSCA Inventory List  
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

#### CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

This product is not listed as a CERCLA substance.

#### SARA Section 313- Supplier Notification

This product does not contain any toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372.

#### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate Hazard (Acute) - Yes  
Delayed Hazard (Chronic) – Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### Section 302 extremely hazardous substance (40 CFR 355, Appendix A)-No

Drug Enforcement Administration (DEA) (21 CFR1308.11-15)-Not controlled

**State regulations** WARNING: This product contains chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

#### US - California Hazardous Substances (Director's):

Calcium Hydroxide (CAS# 1305-62-0)  
Calcium oxide (CAS# 1305-78-8)  
Magnesium oxide (CAS# 1309-48-4)

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT):

Quartz (CAS# 14808-60-7)

#### US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Quartz (CAS# 14808-60-7) Listed: October 1, 1988 Carcinogenic.

#### US - New Jersey RTK - Substances:

Calcium Hydroxide (CAS# 1305-62-0)  
Calcium oxide (CAS# 1305-78-8) Listed.

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## Argos Ready Mix Concrete (Concrete)



Calcium sulfate dihydrate (CAS# 13397-24-5)  
 Limestone (CAS# 1317-65-3)  
 Magnesium oxide (CAS# 1309-48-4)  
 Portland cement (CAS# 65997-15-1)  
 Quartz (CAS# 14808-60-7)

**US - Pennsylvania RTK - Hazardous Substances:**

Calcium Hydroxide (CAS# 1305-62-0)  
 Calcium oxide (CAS# 1305-78-8)  
 Calcium sulfate dihydrate (CAS# 13397-24-5)  
 Limestone (CAS# 1317-65-3)  
 Magnesium oxide (CAS# 1309-48-4)  
 Portland cement (CAS# 65997-15-1)  
 Quartz (CAS# 14808-60-7)

**US - Pennsylvania RTK - Hazardous Substances: Special hazard**

Calcium Hydroxide (CAS# 1305-62-0)  
 Calcium oxide (CAS# 1305-78-8)  
 Calcium sulfate dihydrate (CAS# 13397-24-5)  
 Limestone (CAS# 1317-65-3)  
 Magnesium oxide (CAS# 1309-48-4)  
 Portland cement (CAS# 65997-15-1)  
 Quartz (CAS# 14808-60-7)

**Canadian Regulatory Information**

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**WHMIS status**

Controlled

**WHMIS classification**

E – Corrosive

**WHMIS labeling**



Inventory status	Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian	Inventory of Chemical Substances (AICS)	Yes
Canada	Canada	Domestic Substances List (DSL)	No
Canada	Canada	Non-Domestic Substances List (NDSL)	Yes
China	China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand	New Zealand Inventory	No
Philippines	Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	United States & Puerto Rico	Toxic Substances Control Act (TSCA)	Yes

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## Argos Ready Mix Concrete (Concrete)



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### Inventory

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\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

## 16. OTHER INFORMATION

HMIS® Health rating including an \* indicates a chronic hazard

### HMIS® ratings

Health: 3\*

Flammability: 0

Physical hazard: 1

### NFPA ratings

Health: 3

Flammability: 0

Instability: 1

### Version:

2016.01.20

Issue Date

1/20/2016

Prior Issue Date

5/27/2015

### Description of Revisions

Revise to meet Globally Harmonized System for chemical hazard communication requirements pursuant to OSHA regulatory revisions 77 FR 17884, March 26, 2012.

### Notice to reader

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

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

### Abbreviations

ACGIH — American Conference of Governmental Industrial Hygienists

CAS# — Chemical Abstract Service

CERCLA — Comprehensive Emergency Response and Comprehensive Liability Act

CFR — Code of Federal Regulations

DOT — Department of Transportation

GHS — Globally Harmonized System

HEPA — High Efficiency Particulate Air

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## Argos Ready Mix Concrete (Concrete)



IATA — International Air Transport Association  
IARC — International Agency for Research on Cancer  
IMDG — International Maritime Dangerous Goods  
NIOSH — National Institute of Occupational Safety and Health  
NOEC — No Observed Effect Concentration  
NTP — National Toxicology Program  
OSHA — Occupational Safety and Health Administration  
PEL — Permissible Exposure Limit  
REL — Recommended Exposure Limit  
RQ — Reportable Quantity  
SARA — Superfund Amendments and Reauthorization Act  
SDS — Safety Data Sheet  
TLV — Threshold Limit Value  
TPQ — Threshold Planning Quantity  
TSCA — Toxic Substances Control Act  
TWA — Time-Weighted Average  
UN — United Nations

### **Disclaimer Statement**

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

\*\* End of Safety Data Sheet \*\*