

Ready Mix Concrete

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Date of issue: 04/28/2015

Revision date: 04/28/2015

Version: 1.0



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Ready Mix Concrete
Product code : Not available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Concrete is widely used as a structural component in construction applications

1.3. Details of the supplier of the safety data sheet

Preferred Materials, Inc., 4636 Scarborough Drive, Lutz, Florida 33559

1.4. Emergency telephone number

(813) 973-2888

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Corrosion 1A

Serious Eye Damage 1

Skin Sensitization 1

Specific Target Organ Toxicity - Single Exposure 3

This classification is based on the product as sold. If this product is processed in such a way that dust may be formed, other hazards may apply. This SDS is not applicable to the dust form of this product.

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

GHS07

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

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

Precautionary statements (GHS-US) :

Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing must not be allowed out of the workplace. Use only outdoors or in a well-ventilated area. If swallowed: rinse mouth. Do NOT induce vomiting. Immediately call a poison center/doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a poison center/doctor. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

No additional information available.

2.4. Unknown acute toxicity (GHS US)

Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

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3.2. Mixture

Name	Product identifier	%	GHS-US classification
Cement, portland, chemicals	(CAS No) 65997-15-1	10 - 35	Skin Irrit. 2 Eye Dam. 1 Skin Sens. 1 STOT SE 3
Calcium hydroxide	(CAS No) 1305-62-0	10 - 25	Skin Irrit. 2 Eye Dam. 1 STOT SE 3
Calcium oxide	(CAS No) 1305-78-8	≤5	Skin Corr. 1C
Magnesium oxide (MgO)	(CAS No) 1309-48-4	≤4	Not classified.
Gypsum (Ca(SO ₄).2H ₂ O)	(CAS No) 13397-24-5	≤2	Not classified.
Quartz	(CAS No) 14808-60-7	<0.1	Carc. 1A ¹ STOT RE 1 ¹

¹ Only applies to airborne particles of respirable size.

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May be harmful if inhaled. May cause respiratory tract irritation.
- Symptoms/injuries after skin contact : Causes severe skin burns. Symptoms may include redness, pain, blisters. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. May cause sensitization by skin contact.
- Symptoms/injuries after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Treat for surrounding material.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

- For containment : Contain spill, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Scoop up material and place in a disposal container. Allow the material to harden before disposal. Provide ventilation.

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/ spray. Do not swallow. Handle and open container with care. Avoid generating dust. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Cement, portland, chemicals (65997-15-1)		
ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³ (respirable fraction)
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction) 50 mppcf (<1% Crystalline silica)
Calcium hydroxide (1305-62-0)		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Calcium oxide (1305-78-8)		
ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³
OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
Magnesium oxide (MgO) (1309-48-4)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (inhalable fraction)
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (fume, total particulate)
Gypsum (Ca(SO₄).2H₂O) (13397-24-5)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (inhalable fraction)
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Quartz (14808-60-7)		
ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (respirable fraction)
OSHA	OSHA PEL (TWA) (mg/m ³)	(10 mg/m ³)/(%SiO ₂ +2) TWA (respirable fraction) (30 mg/m ³)/(%SiO ₂ +2) TWA (total dust) (250)/(%SiO ₂ +5) mppcf TWA (respirable fraction)

8.2. Exposure controls

- Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
- Hand protection : Wear suitable waterproof gloves.
- Eye protection : Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).
- Skin and body protection : Wear suitable waterproof protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. A NIOSH approved respirator is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded.
- Environmental exposure controls : Maintain levels below Community environmental protection thresholds.
- Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Semi-fluid, flowable, granular paste
Colour	: Varies (usually gray)
Odour	: None
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not flammable
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Relative vapour density at 20 °C	: No data available
Solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: Varies
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Wet cement is alkaline and incompatible with acid, 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

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified.

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LD50 oral rat	> 2000 mg/kg
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Ready Mix Concrete	
LD50 dermal rabbit	No data available
LC50 inhalation rat	No data available
Calcium hydroxide (1305-62-0)	
LD50 oral rat	7340 mg/kg
Calcium oxide (1305-78-8)	
LD50 oral rat	> 2000 mg/kg
Magnesium oxide (MgO) (1309-48-4)	
LD50 oral rat	> 5000 mg/kg

Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met. Ready Mix Concrete contains crystalline silica that, when respirable, is classified by IARC and NTP as a known human carcinogen. Cutting, crushing or grinding hardened concrete or other crystalline silica-bearing materials will release respirable crystalline silica.

Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans (airborne particles of respirable size)
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens (airborne particles of respirable size)

Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met. This product contains crystalline silica. Under normal use and application Ready Mix Concrete does not release crystalline silica. However, cutting, crushing or grinding hardened concrete or other crystalline silica-bearing materials will release respirable crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica from this product can cause silicosis, a serious disabling and fatal lung disease.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: Causes severe skin burns. Symptoms may include redness, pain, blisters. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. May cause sensitization by skin contact.
Symptoms/injuries after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
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12.2. Persistence and degradability

Ready Mix Concrete	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Ready Mix Concrete	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Effect on the global warming	: No known ecological damage caused by this product.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Allow the material to harden before disposal. This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not regulated for transport.

Additional information

Other information : No supplementary information available.
Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Gypsum (Ca(SO ₄).2H ₂ O)	CAS No 13397-24-5
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15.2. US State regulations

Ready Mix Concrete

State or local regulations	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
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SECTION 16: Other information

Date of issue : 04/28/2015
Other information : None.

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