

Safety Data Sheet – Ready Mix Concrete

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

Section 1 – Identification:

GHS product identifier:	Ready Mix Concrete
Recommended Use:	Concrete is widely used as a structural component in construction applications.
Supplier's Details:	CallananIndustries, Inc. 8 Southwoods Blvd. 4th Floor Albany, NY 12211 (518) 374-2222 www.callanan.com
Emergency telephone number:	(518) 374-2222

Section 2 – Hazards Identification:

GHS Hazard Classification(s):	Skin Corrosion – Category 1A Serious Eye Damage – Category 1 Skin Sensitization – Category 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.

Pictogram(s):



Signal Word:	Danger
Hazard Statement(s):	Causes severe skin burns and eye damage. May cause an allergic skin reaction and/or respiratory irritation.
Precautionary Statement(s):	Do not breathe dust/fume/gas/mist/vapors/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.

Section 3 – Composition and Information on Ingredients:

Mixture: Ready Mix Concrete

Name	Product Identifier	Percentage	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:

Description of Necessary First Aid Measures:

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.
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.
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.
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.

Most Important Symptoms and Effects, both Acute and Delayed:

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.
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
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.
Ingestion	May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

Indication of any Immediate Medical Attention and Special Treatment:

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:

Extinguishing Media:

Suitable extinguishing media	Treat for surrounding material.
Unsuitable extinguishing media	None known.
Fire Hazard	Products of combustion may include, and are not limited to: oxides of carbon.
Protection during firefighting	Protection during firefighting.

Section 6 – Accidental Release Measures:

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.
--------------------------	------------------------------------------------------------------------------------------------------------------------------------

Methods and Materials 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.

Section 7 – Handling and Storage:

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:	Laundry contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.
Conditions for safe storage, including any incompatibilities:	Keep out of the reach of children. Keep container tightly closed. Store in dry, cool, well-ventilated area.

Section 8 – Exposure Controls Personal Protections:

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)

- 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.

Section 9 – Physical and Chemical Properties:

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

Section 10 – Stability and Reactivity:

Reactivity	No dangerous reaction known under conditions of normal use.
Chemical Stability	Stable under normal storage conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat. Incompatible materials.
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.
Hazardous decomposition products	May include, and are not limited to: oxides of carbon.

Section 11 – Toxicological Information:

Information on Toxicological Effect:

Acute toxicity: Not classified

Ready Mix Concrete	
LD50 oral rat	> 2000 mg/kg
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 sensitization: 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:

Toxicity – Ecology - General	May cause long-term adverse effects in the aquatic environment.
Persistence and Degradability	N/A
Bio-Accumulative Potential	N/A
Mobility in Soil	No additional information available.
Other Adverse Effects	No known ecological damage caused by this product

Section 13 – Disposal Considerations:

Disposal Methods	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 – Transportation Information:

	DOT Classification	IMDG	IATA
UN Number	Not Regulated	Not Regulated	Not Regulated
UN Proper Shipping Name	Not Regulated	Not Regulated	Not Regulated
Transport Hazard Class	Not Regulated	Not Regulated	Not Regulated
Packing Group	Not Regulated	Not Regulated	Not Regulated
Environmental Hazards	Not Regulated	Not Regulated	Not Regulated
Additional Information	Not Regulated	Not Regulated	Not Regulated

Section 15 – Regulatory Information:

U.S. Federal Regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200
OSHA Hazard Communication Standard, 29 CFR 1910.1200	Not regulated
TSCA Section 12(b) Export Notification (40 CFR 707, Subpart. D): OSHA	Not Listed
Specifically Regulated Substances (29 CFR 1910.1001-1050):	Not Listed
CERCLA Hazardous Substance List (40 CFR 302.4):	Not Listed
Clean Air Act Section 112 (b): Hazardous Air Pollutants (HAPs):	Not regulated
Clean Air Act Section 112 (r) Accidental Release Prevention (40 CFR 68.130):	Not regulated
Safe Drinking Water Act (SDWA):	Not regulated
Gypsum (Ca(SO₄).2H₂O)	CAS No 13397-24-5
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.

Section 16 – Other Information:

Date of Issue: 03/04/2015

Last Revised: 05/11/2018

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.