



Safety Data Sheet

Ready Mix Concrete (Concrete)

Section 1: Identification

Product: Ready Mix Concrete (Concrete)

Synonyms: Freshly Mixed Unhardened Concrete, Colored Concrete Fiber Reinforced, Flowable Fill, Pervious Concrete, Sand & Gravel Slurry, Light-Weight Concrete, Cold Weather Concrete

Product Use: Concrete is widely used as a structural component in construction applications.

Manufacturer: **LYCON Inc.**

1110 Harding Street

Janesville, WI 53547

Phone: 608-754-7701

Phone: 800-955-7702

Fax: 608-754-8555

Emergency Phone: 608-754-7701

www.lyconinc.com

Section 2: Hazard(s) Identification

GHS LABEL ELEMENTS:

Symbol(s)



Signal Word

Warning!

Hazard Statements

Harmful if inhaled.

Harmful if swallowed.

Harmful in contact with skin.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Causes damage to organs through prolonged or repeated exposure (lungs).

Harmful to aquatic life.

Precautionary Statements

Prevention

Do not breathe dust.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

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

Do not handle until all safety precautions have been read and understood.

Response

If inhaled: Remove to fresh air, seek medical attention if breathing becomes difficult or other symptoms do not subside.

If swallowed: Rinse mouth. Do NOT induce vomiting. If conscious, drink plenty of water. Immediately call a poison center or physician.

If on skin: Wash skin with cool water and a pH-neutral soap. Seek medical attention if irritation or inflammation develops or persists.

In the eyes: Immediately flush eye thoroughly with water for at least 15 minutes, including under the lid. Remove contact lenses, if worn. If irritation persists, seek medical attention.

Take off contaminated clothing and wash it before reuse.



Safety Data Sheet

Ready Mix Concrete (Concrete)

Disposal

Dispose in accordance with State, Federal and Local regulations.

Section 3: Composition/Information on Ingredients

Component	Percent* (By Weight)	CAS Number	OSHA PEL – TWA (mg/m ³)	ACGIH TLV – TWA (mg/m ³)
Portland Cement	10-30	65997-15-1	15 (T); 5 (R)	10 (T)
Fly Ash	0-20	68131-74-8	15 (T); 5 (R)	10 (T)
Crystalline Silica (Sand & Gravel)	35-95	14808-60-7	[(10) / (%SiO ₂ +2)] (R); [(30) / (%SiO ₂ +2)] (T)	0.025 (R)
Slag Cement	0-20	65996-69-2		

(T) = Total Particulate

(R) = Respirable Particulate

* Varies on Type of Mix

General Product Information

Trace Elements: Ready Mix Concrete is made from materials mined from the earth. Trace amounts of naturally occurring elements might be detected during chemical analysis of these materials.

Section 4: First-Aid Measures

Eyes

Immediately flush eyes thoroughly with water. Continue flushing eyes for at least 15 minutes, including under the lids, to remove all particles. Remove contact lens if wearing. Call physician if irritation persists.

Skin

Wash skin with cool water and pH-neutral soap or a mild detergent intended to be used on the skin. Seek medical attention for rash, burns, irritation, dermatitis, and prolonged unprotected exposures to wet concrete.

Ingestion

Do NOT induce vomiting. Rinse mouth. If conscious, give plenty of water to drink and seek medical attention.

Inhalation

Remove to fresh air. Seek medical attention if coughing and other symptoms do not subside. Inhalation of large amounts of dry ingredients in Ready Mix Concrete requires immediate medical attention.

Section 5: Fire-Fighting Measures

General Fire Hazards

See Section 9 for Flammability Properties.

Non-Combustible

Hazardous Combustion Products

None

Extinguishing Media

Use appropriate extinguishing media for surrounding fire.

Unsuitable Extinguishing Media

None

Fire Fighting Equipment/Instructions

Avoid breathing dust.

Wet concrete is caustic.

Firefighters should wear full protective gear.



Safety Data Sheet

Ready Mix Concrete (Concrete)

Section 6: Accidental Release Measures

General

Place spilled material into a container. Avoid contact with the skin. Wear appropriate protective equipment as described in Section 8. Scrape wet concrete and place in container. Allow material to dry or solidify before disposal. Do not wash concrete down sewage and drainage systems or into bodies of water (e.g. streams).

Waste Disposal Method

Dispose of concrete according to State, Federal and Local regulations.

Section 7: Handling and Storage

Usage

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

Clothing

Promptly remove and launder clothing that is wet with concrete. Thoroughly wash skin after exposure to wet concrete.

Section 8: Exposure Controls/Personal Protection

Engineering Controls

Use local exhaust or general dilution ventilation or other suppression method to maintain dust levels below exposure limits.

Respiratory Protection

Under ordinary conditions no respirator protection is required. A NIOSH approved respirator that is properly fitted and is in good working condition is recommended in poorly ventilated areas or when exposed to dust above exposure limits.

Eye Protection

Wear ANSI approved safety glasses with side shields or safety goggles when handling wet concrete to prevent contact with eyes. Wearing contact lenses when using concrete is not recommended.

Skin Protection

Wear gloves, boots and protective clothing (long sleeve shirt and pants) impervious to water to prevent skin contact. Do not rely on barrier creams, in place of impervious gloves. Remove clothing and protective equipment that becomes saturated with wet concrete and immediately wash exposed areas.

Hygienic Practices

Wash exposed skin with soap and water before eating, drinking, smoking and using toilet facilities. Shower with soap and water after completion of work.

Section 9: Physical and Chemical Properties

Physical State:	Semi-fluid, Flowable, granular paste.	Evaporation Rate:	NA
Appearance:	Variety of color (usually gray)	pH (in water):	12-13
Odor:	None	Boiling Point:	NA
Vapor Pressure:	NA	Melting Point:	NA
Vapor Density:	NA	Viscosity:	Varies
Specific Gravity:	1.9-2.4	Solubility in Water:	Slightly
Ignition:	Non-Flammable	Flash point:	NA

Section 10: Stability and Reactivity

Stability

Stable. Avoid contact with incompatible materials.



Safety Data Sheet

Ready Mix Concrete (Concrete)

Incompatibility

Wet concrete is alkaline and is incompatible with acids, ammonium salts and aluminum metal. Cement dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Cement reacts with water to form silicates and calcium hydroxide. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.

Hazardous Polymerization None.

Hazardous Decomposition None.

Section 11: Toxicological Information

Likely Routes of Exposure:

Skin contact, skin absorption, eye contact, inhalation, and ingestion.

Potential Health Effects: Skin Corrosion

Discomfort or pain cannot be relied upon to alert a person to a hazardous skin exposure. Consequently, the only effective means of avoiding skin injury or illness involves minimizing skin contact, particularly contact with wet concrete. Exposed persons may not feel discomfort until hours after the exposure has ended and significant injury has occurred. Exposure during the handling or mixing of the dry ingredients in Ready Mix Concrete may cause drying of the skin with consequent mild irritation or more significant effects attributable to aggravation of other conditions. Exposure to wet concrete may cause more severe skin effects including thickening, cracking or fissuring of the skin. Prolonged exposure can cause severe skin damage in the form of (caustic) chemical burns, including third degree burns.

Potential Health Effects: Eye Damage

Exposure to airborne dust during the sawing of hardened concrete or handling/mixing of the dry ingredients in Ready Mix Concrete may cause immediate or delayed irritation or inflammation. Eye contact by splashes of wet concrete may cause effects ranging from moderate eye irritation to chemical burns. Such exposures require immediate first aid (see Section 4) and medical attention to prevent significant damage to the eye.

Potential Health Effects: Ingestion

Although inadvertent ingestion of small quantities of wet concrete or its dry ingredients are not known to be harmful, accidental ingestion of larger quantities can be harmful and requires immediate medical attention.

Potential Health Effects: Inhalation (Acute)

The ingredients in Ready Mix Concrete contain crystalline silica. Exposure to these ingredients in excess of the applicable TLV or PEL may cause or aggravate other lung conditions. Exposure to the dry ingredients in Ready Mix Concrete may cause irritation to the moist mucous membranes of the nose, throat, and upper respiratory system.

Carcinogenicity

General Product Information (Chronic)

May cause cancer.

Crystalline Silica: Exposures to respirable crystalline silica are not expected during the normal use of this product. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease and/or lung cancer. IARC states that crystalline silica in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).

Component Carcinogenicity

Cement, portland, chemicals

ACGIH: Not Classifiable as a Human Carcinogen. However, cement contains trace amounts of crystalline silica and hexavalent chromium which are classified by the IARC and NTP as known human carcinogens.

Crystalline Silica, Quartz

ACGIH: Suspected Human Carcinogen

NIOSH: Potential Occupational Carcinogen

NTP: Known Human Carcinogen

IARC: Monograph 100C [2012] Crystalline silica in the form of quartz or cristobalite is carcinogenic to humans (Group 1)

Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

Specific Target organ General Toxicity: Single Exposure

This product is not reported to have any single exposure specific target organ toxicity effects.



Safety Data Sheet

Ready Mix Concrete (Concrete)

Specific Target Organ General Toxicity: Repeated Exposure

Causes damage to organs through prolonged or repeated exposure (lungs).

Aspiration Respiratory Organ hazard

This product is not reported to have any aspiration hazards.

Section 12: Ecological Information (non-mandatory)

Seek information from appropriate regulatory agencies.

Section 13: Disposal Considerations (non-mandatory)

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Container or Packaging

Dispose of contents/container in accordance with State, Federal and Local regulations.

Section 14: Transport Information (non-mandatory)

This product is not classified as a Hazardous Material under U.S. DOT regulations.

Section 15: Regulatory Information (non-mandatory)

OSHA/MSHA Hazard Communication

This product is considered by OSHA/MSHA to be a hazardous chemical and should be included in the employer's hazard communication program.

CERCLA/SUPERFUND

This **product** is not listed as a CERCLA hazardous substance.

Section 16: Other Information

Abbreviations

PPE	Personal Protective Equipment	NA	Not Applicable
ACGIH	American Conference of Governmental Industrial Hygienists	NIOSH	National Institute for Occupational Safety and Health
DOT	U.S. Department of Transportation	NTP	National Toxicology Program
HMIS	Hazardous Materials Identification System	PEL	Permissible Exposure Limit
IARC	International Agency for Research on Cancer	OSHA	Occupational Safety and Health Administration
MSHA	Mine Safety and Health Administration	pH	Negative log of hydrogen ions
TLV	Threshold Limit Value		

HMIS: Health-1, Flammability-0, Reactivity-0

HMIS Definitions: 0-Minimal, 1-Slight, 2-Moderate, 3-Serious, 4-Extreme

Protective Equipment: Safety glasses, gloves, impervious clothing, and boots (respirator if cutting/sawing hardened concrete)

The information in this Safety Data Sheet concerning health hazard data was obtained from sources believed to be reliable. However, the information is provided without any representation or warranty, expressed or implied, regarding its accuracy or correctness. Once this product leaves our facility, the conditions or methods of handling, storage, use and disposal of the product are beyond LYCON Inc.'s control and may be beyond our knowledge. For this and other reasons, LYCON Inc. does not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

Revision 1 April 16, 2015
Revision 2 May 23, 2016