READY MIX CONCRETE

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier — Ready Mix Concrete

Chemical Name	Mixture
CAS No.	Mixture
Trade Name(s)	Concrete

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

Identified Use(s)	Construction material
Uses Advised Against	None.

Details of the supplier of the safety data sheet

Company Identification	O&G Industries 112 Wall Street Torrington, Connecticut 06790
Telephone	(860) 489-9261

Emergency telephone number

Emergency Phone No.	Not classified as dangerous for supply/use. Please contact the supplier above during normal business hours.

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200) / GHS Classification — Eye Dam. 1; Skin Corr. 1C; Skin Sens. 1B

Label elements

Hazard Symbol

Signal Word(s) — **DANGER**

Hazard Statement(s) — Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Precautionary Statement(s) — Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands and exposed skin after use.

Other hazards — Mechanical disruption (e.g., milling, cutting, chipping) of cured concrete may release crystalline silica dust which: Causes damage to organs: Lungs (silicosis) and May cause cancer: Lungs. Avoid breathing dust. Wear suitable respiratory protective equipment if processing involves working in areas where dusts are likely to be evolved.

Additional Information — None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Composition/information on ingredients	% wt.	CAS No.
Aggregate (crushed stone, sand, gravel, slag)	> 50	Various
Portland Cement ^	10 - 30	8052-42-4
Concrete additives	< 1	Various
Water	10 - 20	7732-18-5

^Contains: <0.1% hexavalent chromium (CrVI) metals and salts.

Other Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below. Please see Section 8 of SDS for more details.

- Mechanical disruption (e.g., milling, cutting, chipping) of cured concrete may release crystalline silica dust.

Additional Information - None

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Inhalation	Not normally required. Move person to fresh air. Apply artificial respiration if necessary. If symptoms persist, obtain medical attention.
Skin Contact	Wash immediately with water. Table vinegar and additional water may help to neutralize and prevent skin burns. If irritation (redness, rash, blistering) develops, get medical attention.
Eye Contact	Flush eyes with water for at least 15 minutes while holding eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.
Ingestion	Not normally required. Do not induce vomiting. Do not give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.
Most important symptoms and effects, both acute and delayed	May cause an allergic skin reaction. Contains: trace chromium metals and salts inherent in portland cement.
Indication of any immediate medical attention and special treatment needed	None known

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

-Suitable Extinguishing Media	Non-combustible. As appropriate for surrounding fire.
-Unsuitable Extinguishing Media	None anticipated.
Special hazards arising from the substance or mixture	None known

Advice for fire-fighters A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Not normally required.
Environmental precautions Not normally required.
Methods and material for containment and cleaning up Not normally required.
Reference to other sections None
Additional Information None.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling Mechanical disruption (e.g., milling, cutting, chipping) of cured concrete may release crystalline silica dust. Avoid breathing dust. Wear suitable respiratory protective equipment if processing involves working in areas where dusts are likely to be evolved.

Conditions for safe storage, including any incompatibilities

-Storage temperature Ambient temperatures.
-Incompatible materials Strong oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits: Applicable only to heated product or milling, cutting, chipping of the product.

SUBSTANCE.	CAS No.	(8hr TWA)		(STEL)		Note:
		PEL (OSHA) *	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
Crystalline Silica (respirable particulate)	------	0.050 mg/m3 (R) *	0.025 mg/m3 ^	------	------	See below

(R)Respirable fraction; ^Suspected Human Carcinogen; * OSHA Carcinogen - employers must ensure compliance with 1926.1153 - Respirable Crystalline Silica, as applicable.; TWA = 8 hour time-weighted average; STEL = Short Term Exposure Limit.

Recommended monitoring method NIOSH 7500 (Crystalline Silica)

Exposure controls

Appropriate engineering controls Not normally required.

Personal protection equipment

Eye/face protection The following to be used as necessary: Safety Glasses

Skin protection (Hand protection/ Other) The following to be used as necessary: Impervious gloves and boots.

Respiratory protection	In case of heating the product or milling, cutting, chipping of the product, respiratory protection may be needed if occupational exposure limits are exceeded. Air-purifying respirator may be sufficient. Check with protective equipment manufacturer's data.
Thermal hazards	Not normally required.
Environmental Exposure Controls	Not normally required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid / Solid Mixture
Color.	Grey
Odor	None
Odor Threshold (ppm)	Not available.
pH (Value)	> 11
Melting Point (°C) / Freezing Point (°C)	Not applicable.
Boiling point/boiling range (°C):	Not applicable.
Flash Point (°C)	Non-combustible.
Evaporation Rate	Not available.
Flammability (solid, gas)	Not applicable.
Explosive Limit Ranges	Non-combustible.
Vapor pressure (Pascal)	Not applicable.
Vapor Density (Air=1)	Not applicable.
Density (g/ml)	~ 2.0 - 2.5
Solubility (Water)	Negligible
Solubility (Other)	Not known
Partition Coefficient (n-Octanol/water)	Not applicable.
Auto Ignition Point (°C)	Non-combustible.
Decomposition Temperature (°C)	Not applicable.
Kinematic Viscosity (cSt) @ 40°C	Not available
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Other information	Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable.
Possibility of hazardous reactions	May react violently with: strong acids
Conditions to avoid	Incompatible materials
Incompatible materials	Strong acids
Hazardous decomposition product(s)	None known

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

Information on toxicological effects

Cement:

Acute toxicity	Not acutely toxic
Irritation/Corrosivity	Causes severe skin burns and eye damage.
Sensitization	May cause an allergic skin reaction.

Repeated dose toxicity	Not to be expected.
Carcinogenicity	Not to be expected at typical road paving temperatures.

NTP	IARC	ACGIH	OSHA
No.	Yes.*	No.	No.

Mutagenicity	Not to be expected.
Reproductive toxicity	Not to be expected.
Other information	* Mechanical disruption (e.g., milling, cutting, chipping) of cured concrete may release crystalline silica dust.

Crystalline Silica (quartz and christobalite)

Acute toxicity	LD50 (rat): >5000 mg/kg bw LD50 (dermal): >2000 mg/kg bw LC50 (inhalation, fume): >94.4 mg/m^3 - Causes damage to organs: Lungs (silicosis)
Irritation/Corrosivity	Not to be expected
Sensitization	Not to be expected
Repeated dose toxicity	Causes damage to organs through prolonged or repeated exposure: Lungs (silicosis), immune system, kidneys.
Carcinogenicity	May cause cancer. Lungs

NTP	IARC	ACGIH	OSHA
No.	Yes.	A2	Yes.

Mutagenicity	Not to be expected.
Reproductive toxicity	Not to be expected.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Short term	Not acutely toxic
Long Term	Not to be expected.
Persistence and degradability	The product is not biodegradable.
Bioaccumulative potential	The product has no potential for bioaccumulation.
Mobility in soil	The product has low mobility in soil.
Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods	Disposal should be in accordance with local, state or national legislation.Consult an accredited waste disposal contractor or the local authority for advice.
Additional Information	None known.

SECTION 14: TRANSPORT INFORMATION

Ground or Water Domestic Voyage (DOT):	Not classified as dangerous for transport.

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status**:** All components listed or polymer exempt.

RCRA Hazardous Waste Number (40 CFR 261.33): None

US RCRA Hazard Class: Not applicable**.**

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
None	-----	-----	-----

SARA 311/312 - Hazard Categories:

☐ Fire ☐ Sudden Release ☐ Reactivity ☒ Immediate (acute) ☐ Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
None	-----	-----

SARA 302 - Extremely Hazardous Substances(40 CFR 355):

Chemical Name	CAS No.	Typical %wt.	TPQ (pounds)
None	-----	-----	-----

SECTION 16: OTHER INFORMATION

Additional Information

The following sections contain revisions or new statements: 1-16.

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