Product Name: Sand
Revision Date: 8/11/2016
Emergency Response Number: 920.749.3360

MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: Sand
Chemical Formula: Mixture
Molecular Weight: Not Applicable
Trade Name: Sand, Manufactured Sand, Concrete Sand, Gravel

Manufacturer:
MCC, INC.
2600 N. Roemer Rd
Appleton, WI 54911

SECTION 2 HAZARDS IDENTIFICATION

Sand is a naturally occurring material composed of unconsolidated rock fragments being finer than gravel and coarser than silt. It is odorless and not flammable. Respirable dust particles containing silicon dioxide may be generated by handling sandstone rock. Inhalation of excessive particulate matter may cause respiratory problems.

Hazard Statement: Crystalline silica, a component of this product, has been designated as a Group 1 carcinogen by IARC. Prolonged or repeated inhalation of respirable crystalline silica can cause silicosis, and may cause cancer.

Primary route of exposure: Inhalation

EYE CONTACT: Direct contact with dust may cause irritation by mechanical abrasion. Conjunctivitis may occur.

SKIN CONTACT: Direct contact may cause irritation by mechanical abrasion. Some components of material are also known to cause mild corrosive effects to skin and mucous membranes.

SKIN ABSORPTION: Not expected to be a significant route of exposure.

INGESTION: Small amounts (a tablespoonful) swallowed during normal handling operations are not likely to cause injury. Ingestion of large amounts may cause gastrointestinal irritation and blockage.

INHALATION: Dust may irritate nose, throat, mucous membranes, and respiratory tract by mechanical abrasion. Coughing, sneezing, chest pain, shortness of breath, inflammation of mucous membrane, and flu-like fever may occur following exposures in excess of appropriate exposure limits. Repeated excessive exposure may cause pneumoconiosis, such as silicosis and other respiratory effects.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS Registry #	% by weight (approx)	MSHA/OSHA PEL
Silicon Dioxide, SiO2	7631-86-9	55-75	(R) 10 mg/m3 /(% SiO2 +2)
Aluminum Oxide, Al2O3	1344-28-1	0-5	(T) 15 mg/m3 , (R) 5 mg/m3
Ferric Oxide, Fe2O3	1309-37-1	0-5	10 mg/m3
Magnesium Oxide, MgO	1309-48-4	0-5	15 mg/m3
Calcium Oxide, CaO	1305-78-8	0-5	5 mg/m3
Sodium Oxide, Na2O	1313-59-3	>1	-
Potassium Oxide, K2O	12136-45-7	0-5	-
Calcium Carbonate, CaCO3	471-34-1	10-20	(T) 15 mg/m3 , (R) 5 mg/m3

SECTION 4 FIRST AID MEASURES

EYES: Flush with warm water for 15 minutes. Remove contacts if present. If irritation persists, seek medical attention.

SKIN: Wash with soap and water. If irritation persists, seek medical attention.

INGESTION: If conscious, drink large quantity of water. Never give anything by mouth to an unconscious person. Seek medical attention.

INHALATION: Move to a well ventilated area. If irritation persists, seek medical attention.

SECTION 5 FIRE FIGHTING MEASURES

FLASHPOINT: Not Flammable

FLAMMABLE LIMITS IN AIR: Not Flammable

FIRE FIGHTING: Not Applicable

FLAMMABLE CLASS: Not Flammable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Follow precautions listed in Section 7. Dust generated from spilled materials may overexpose cleanup personnel to respirable crystalline silica containing dust. Do not dry sweep. Wetting spilled material and/or the use of respiratory protective equipment may be necessary.

In the event of a spill, this product is not subject to reporting requirements.

SECTION 7 HANDLING AND STORAGE

Do not climb or stand in piles of this product as it may be unstable. Keep airborne dust to a minimum. Avoid breathing dust. Avoid contact with eyes and mucous membranes. Wear appropriate protective clothing.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredients	Exposure Limits
Particulates not otherwise classified	**ACGIH TLV** TWA: 3 mg/m3 for respirable particles TWA: 10 mg/m3 for inhalable particles **OSHA PEL**

	PEL: 5 mg/m3 for respirable fraction PEL: 15 mg/m3 for total dust TWA: 5 mg/m3 for respirable fraction TWA: 15 mg/m3 for total dust
Crystalline Silica (Quartz)	**OSHA PEL** TWA: 0.3 mg/m3 for total dust TWA: 0.1 mg/m3 for respirable fraction
Crystalline Silica (All forms)	**ACGIH TLV** TWA: 0.025 mg/m3 for respirable fraction **NIOSH REL** TWA: 0.05 mg/m3 for respirable dust

SKIN PROTECTION:
Wash dust-exposed skin with soap and water before eating, drinking, smoking, and using the toilet facilities. Wash work clothes after each use.

RESPIRATORY PROTECTION:
Avoid actions that cause dust to become airborne. Use local or general exhaust ventilation to control exposures below applicable exposure limits.

Use NIOSH/MSHA approved (under 30 CFR 11) or NIOSH approved (under 42 CFR 84) respirators in poorly ventilated areas, if an applicable exposure limit is exceeded, or when dust causes discomfort or irritation. (Advisory: Respirators and filters purchased after June 10, 1998 must be certified under 42 CFR 84.)

VENTILATION:
Use local exhaust or general dilution ventilation to control exposure within applicable limits.

EYE PROTECTION:
Safety glasses with side shields should be worn as minimum protection. In extremely dusty and/or unpredictable environments wear unvented or indirectly vented goggles to avoid eye irritation or injury. Contact lenses should not be worn when working with products which may generate airborne dust.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Appearance and Odor:	Angular gray, white and tan particles finer than gravel and coarser than silt . No odor.
Specific Gravity:	2.50 – 2.70
Boiling Point:	Not applicable
Vapor Density in Air	Not Applicable
Vapor Pressure:	Not applicable
% Volatile, by Volume	0%
Evaporation Rate:	Not applicable
Solubility in Water:	Insoluble

SECTION 10 STABILITY AND REACTIVITY

Stable:	Yes
Hazardous Polymerization:	No
Polymerization:	Will not occur

Incompatability: Powerful oxidizing agents such as fluoride, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen defluoride. Contact of these materials may cause fire and/or explosions. Silica dissolves in hydrofluoric acid producing a corrosive gas – silicon tetrafluoride.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity: Not expected to be acutely toxic.

Skin: May cause irritation with prolonged or repeated contact possibly leading to dermatitis.

Eyes: May cause transient irritation.

Inhalation: Prolonged exposure may give rise to respiratory illness such as chronic bronchitis, pneumoconiosis and silicosis.

Ingestion: Extremely unlikely. However accidental ingestion may cause discomfort.

SECTION 12 ECOLOGICAL INFORMATION

This product is mined from the environment and unaltered. Not expected to be harmful to aquatic organisms. Discharging sand and gravel fines into waters may increase total suspended solids (TSS) to levels that can be harmful to certain aquatic organisms.

SECTION 13 DISPOSAL CONSIDERATIONS

Clean material may be reused. Material contaminated with foreign substances should be disposed of in accordance with local, state, and federal laws and regulations. Do not allow particulate matter to drain into sewers or water supplies.

SECTION 14 TRANSPORT INFORMATION

DOT Hazard Classification: None

Placard Required: None

SECTION 15 REGULATORY INFORMATION

Crystalline silica, a component of this product, is on the NTP and IARC carcinogen lists, but not on the OSHA carcinogen list. In October 1996, an IARC Working group re-assessing crystalline silica, a component of this product, designated crystalline silica as a human carcinogen (Group 1 Carcinogen).

Crystalline silica in October 1996 was listed on the Safe Drinking Water and Toxic Enforcement ACT of 1986 (California Proposition 65) as chemical known to the state to cause cancer or reproductive toxicity.

SECTION 16 OTHER INFORMATION

Manufacturer Disclaimer: The information and recommendations contained herein are offered in good faith as accurate. The information provided herein applies only to the specific product designated and may not be valid where said product is used in combination with any other material or in any process. It is the user's responsibility to determine the suitability of the information for their purposes. No warranty of fitness for any particular purpose, warranty of merchantability, or any other warranty, expressed or implied, is made concerning the information provided.