



Safety Data Sheet (SDS)

Sand & Gravel

SECTION 1: Material Identification and Use

• Product Identifier: Sand & Gravel

Synonyms: Natural sand, aggregate, crushed rock, gravel, fill sand, crushed stone **Note:** This SDS covers many types of sand and gravel produced. The individual composition and hazards components of the mixtures will vary between the type of sand and gravel.

• Intended use of Product

Sand & gravel are aggregate products. They are used in the manufacturing of cement, concrete, bricks, paving material, mortar, and other construction uses.

• Details of the supplier of the safety data sheet:

VCNA Prairie, LLC 7601 West 79th Street Bridgeview, IL 60455 General Phone Number: (708) 458-0400

• EMERGENCY TELEPHONE NUMBER: (708) 458-0400

SECTION 2: Hazard identification

Classification of the substance or mixture:

Carcinogenicity- Category- 1A Target Organ Toxicity- 2A Repeat Exposure Skin Corrosion- Category 2 Eye Damage/irritation- 2A

Label elements





Signal word: Danger

Hazard statements:

- May cause respiratory irritation
- May cause cancer (inhalation).
- May cause damage to organs (lung/respiratory system) through prolonged or repeated exposure (inhalation)

• May cause serious eye irritation

Precautionary statements:

- o Obtain special instruction before use
- o Do not breath dust. Do not eat, drink or smoke when using this product.
- o Wash hands, forearms, and exposed areas thoroughly after handling.
- Wear protective gloves, protective clothing, face protection, eye protection.
- IF INHALED: Remove person to fresh air and rest in a position comfortable for breathing.
- o If exposed or concerned: Get Medical advice/attention
- o Disposal in accordance with local, regional, national, and international regulations

Supplemental Information:

Respirable Crystalline Silica (RCS) may cause cancer. Sand and Gravel is a naturally occurring mineral complex that contains varying quantities of quartz (crystalline silica). In its natural bulk state, sand and gravel is not a known health hazard. Sand and gravel may be subjected to various natural or mechanical forces that produce small particles (dust) which may contain respirable crystalline silica (particles less than 10 micrometers in aerodynamic diameter). Repeated inhalation of respirable crystalline silica (quartz) may cause lung cancer according to IARC and NTP; ACGIH states that it is a suspected cause of cancer. Other forms of RCS (e.g. tridymite and cristobalite) may also be present or formed under certain industrial processes.

• Other hazards

Dust may cause irritation to eyes, nose, throat, and lungs. Direct contact to eyes may cause corneal injury. Persons with respiratory disorders (emphysema, COPD, asthma, bronchitis) can be aggravated by exposure. Exposure to dust may aggravate existing skin and/or eye conditions.

SECTION 3: Composition/information on ingredients

• Substances and Mixtures: Sand and Gravel

Composition	Cas No.	% by weight	Exposure Limits
Natural Sand & Gravel	None	>99	Total Dust= 30mg/m ³ divided by
			(%quartz+3)
			Respirable Dust= 10mg/m ³ divided
Silica (Quartz)	14808-60-7	>1	by (%quartz+2)
			Respirable Crystalline Silica has an
			AGCIH TLV of 0.1mg/m ³

SECTION 4: First aid measures

• First-aid measures

General information: Seek immediate medical attention if there is difficulty breathing. Never give anything by mouth to an unconscious person.

Inhalation: If symptoms occur, remove individual from exposure to open air or a well ventilated area. Keep person in a position that is comfortable for breathing. If person is not breathing, give artificial respiration.

Skin contact: May cause dry skin, irritation, or abrasions. Get medical attention if irritation develops and persists

Eye contact: May cause irritation or inflammation. If particles are in direct contact with the eye, may cause abrasions. Immediately flush eye with water for at least 15 minutes. Get medical attention if irritation develops or persists.

Ingestion: Do not ingest product. If ingestion occurs, rise mouth with water. And seek medical advice.

Chronic Symptoms: Chronic exposure to repairable quartz-containing dust in excess of TLVs has caused silicosis, a progressive pneumoconiosis

• Most important symptoms and effects, both acute and delayed

General information: Irritation to eyes, skin, and respiratory system.

Inhalation: Irritation to the nose, throat, or lungs. May cause difficulty in breathing and/or shortness of breath and coughing.

Prolonged inhalation of crystalline silica can cause silicosis and may cause cancer.

Skin contact: Immediately wash skin with soap and water. Seek medical attention if irritation develops.

Eye contact: Do not rub eyes. Immediately flush eyes with large quantities of water for at least 15 minutes. Consult a physician.

• Indication of any immediate medical attention and special treatment needed

If there are medical concerns, get medical advice or attention.

• See Toxicological Information (Section 11)

SECTION 5: Firefighting measures

• Extinguishing media:

<u>Suitable extinguishing media</u>: Sand and gravel is not flammable, will not ignite Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: None known

• Special hazards arising from the substance or mixture

Sand and gravel is neither a fire or explosion hazard.

• Advice for fire-fighters

Sand and gravel does not create a fire related hazard.

SECTION 6: Accidental release measures

• Personal precautions, protective equipment and emergency procedures

Clean up of spill may require personal protective equipment to prevent dust exposures and protect against irritation.

For non-emergency personnel

Protective equipment:	Use appropriate personal protective equipment.
Emergency procedures:	Evacuate non- essential personnel from area

For emergency responders

<u>Personal protective equipment:</u> Use appropriate protective equipment and clothing during clean-up of material that can produce dust.

• Environmental precautions:

Avoid discharge of particulate matter into drains, sewers, and public waters.

• Methods and material for containment and cleaning up

For containment: Place spilled material into a container. Avoid actions that would cause dust or particles to become airborne. Appropriate PPE may be required to prevent dust exposure and protect against irritation.

For cleaning up: Do not dry sweep or sure compressed air for clean-up. Wetting of spilled material and repiratory equipment may be nessisary. Avoid actions that would cause dust or particles to become airborne.

SECTION 7: Handling and storage

• Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Material should be stored in a manner to keep airborne dust to a minimum. Avoid contact with eyes, skin, and clothing. Do not breathe dust. Avoid prolonged exposure.

Advice on general occupational hygiene

Wash hands and other exposed area with soap and water before eating, drinking, or smoking. Launder dusty clothing.

• Conditions for safe storage, including any incompatibilities Store in a well ventilated place. Avoid dust formation or accumulation

SECTION 8: Exposure controls/personal protection

• Control parameters

Occupational exposure limits:

- 1- Value equivalent to OSHA formulas (29 CFR 1910.1000; 29 CFR 1917; 29 CFR 1918)
- 2- Value also applies to MSHA metal/non-metal (1973 TLVs at 30 CFR 56/57.5001)
- 3- OSHA enforces 0.250 mg/m³ in construction and shipyards (CPL-03-00-007)
- 4- Value also applies to OSHA construction (29 CRF 1926.55 Appendix A) and shipyards (29 CFR 1915.1000 Table Z)
- 5- MSHA limit= 10mg/m³

Ingredient name	Exposure limits
Particulates not otherwise classified (CAS SEQ 250)	ACGIH TLV (United States, 3/2012) TWA: 3 mg/m ³ . Form: Respirable particles (2) TWA: 10 mg/m ³ . Form : Inhalable particles (2) OSHA PEL (United States, 6/2010) PEL: 5 mg/m ³ . Form: Respirable fraction PEL: 15 mg/m ³ . Form: Total dust (4) TWA: 5 mg/m ³ . Form: Respirable fraction (1) TWA: 15 mg/m ³ . Total dust (1,4,5)
Crystalline Silica (Quartz) (CAS 14808-60-7)	OSHA PEL (United States, 6/2010) TWA: 0.3 mg/m ³ . Form: Total dust (1,2) TWA: 0.1 mg/m ³ . Respirable (1,2,3)
Crystalline Silica (all forms, CAS mixture)	ACGIH TLV (United States, 3/2012) TWA: 0.025 mg/m ³ . Form: Respirable fraction NIOSH REL (United States, 6/2009) TWA: 0.05 mg/m ³ . Form: Respirable dust

• Personal protective equipment

Eye / Face protection: Safety glasses, goggles, or face shield when necessary to prevent eye contact.

Skin protection:

Hand protection: Protective gloves made of rubber PVC, Neoprene, or other impervious material

<u>Body protection:</u> Arm sleeves when necessary to prevent skin contact. A dust mask or respirator is recommended. If airborne concentrations exceed TLV, a self-contained breathing apparatus is advised.

Respiratory Protection: When handling or performing work with sand or gravel that produces dust or respirable crystalline silica in excess of applicable exposer limits, wear a NIOSH approved respirator that is properly fitted and in good condition.

SECTION 9. Physical and chemical properties

• Information on basic physical and chemical properties

Physical state:	Solid
Appearance:	Angular or round particles
Color:	Multi-colored
Odor:	No odor
Odor threshold:	Not available
pH:	N/A
Evaporation Rate:	N/A
Meting Point:	Partial melting begins at approximately
	2930° F
Freezing point:	N/A
Boiling Point:	N/A
Flammability (solid, gas):	N/A
Upper/Lower flammability limits:	N/A
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Flash Point:	Non-combustible
Vapor pressure:	N/A
Vapor density:	N/A
Specific gravity:	2.6
Solubility:	Insoluble in water
Partition coefficient: n-octanol/water:	Not available
Viscosity:	N/A, solid

SECTION 10: Stability and reactivity

- **Reactivity:** This product is stable and non-reactive under normal conditions of use, storage, and transport.
- **Chemical stability:** Stable under recommended handling and storage conditions (see section 7)
- **Possibility of hazardous reactions:** No dangerous reaction known under conditions of normal use.
- Conditions to avoid: Avoid contact with strong oxidizing agents
- Incompatible materials: None determined
- Hazardous decomposition products: None

SECTION 11: Toxicological information

• Information on toxicological effects

Likely routes of exposure

Inhalation: Repeated inhalation of respirable crystalline silica may cause silicosis which is irreversible and may be fatal. Skin contact: May cause irritation through abrasion Eye contact:May cause irritation through abrasionIngestion:Not likely but may cause discomfort

Acute toxicity: Not expected to be acutely toxic

Skin corrosion/irritation: Not expected to be a skin hazard

Eye damage/irritation: Direct contact may cause irritation

Sensitization: No respiratory or skin sensitizing effects known

Carcinogenicity: May cause cancer if inhaled

Germ cell mutagenicity: Not classified

Reproductive toxicity: Not expected to be a reproductive hazard

Specific target organ toxicity (repeated exposure): May cause damage to lung/respiratory system through prolonged or repeated exposure.

Specific target organ toxicity (single exposure): May cause irritation to lungs/respiratory system.

Aspiration hazard: Not classified

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms of skin contact: May cause dry skin, irritation, discomfort, or abrasions.

<u>Symptoms of inhalation:</u> Irritation of the respiratory system, may cause coughing. Prolonged or repeated inhalation of silica from this product can cause silicosis. The extent and severity of lung injury depends on the duration and level of exposure.

<u>Symptoms of eye contact:</u> May cause immediate or delayed irritation or inflammation. If occurs, seek medical advice or attention.

Symptoms of ingestion: Ingestion is unlikely but may cause discomfort

SECTION 12: Ecological information

- Toxicity: Not expected to be harmful to aquatic organisms
- Persistence and degradability: N/A
- Bioaccumulative potential: N/A
- Mobility in soil: N/A
- Other adverse effects: No other adverse environmental effects.

SECTION 13: Disposal considerations

• Waste treatment methods

Disposal recommendations: Dispose of waste material in accordance with all local, regional, state, national, and international regulations.

If this material, as provided by the manufacturer, becomes a waste, it does not meet the criteria of a hazardous waste as defined by the Environmental Protection Agency under the authority of the Resource Conservation and Recovery Act (40 CFR 261). Dispose in accordance with Federal, State, and Local regulation.

SECTION 14: Transport information

DOT	Not regulated for transport
ΙΑΤΑ	Not regulated for transport
IMDG	Not regulated for transport

SECTION 15: Regulatory information

• OSHA Hazard Communication Standard 29 CFR 1910.1200; Product is a "hazardous chemical"

SECTION 16: Other information, including date of preparation or last revision

Revision Date: 10/23/17

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