

Safety Data Sheet- SDS: Sand and Gravel

SECTION 1. IDENTIFICATION

PRODUCT IDENTIFIER: Sand and Gravel

OTHER IDENTIFIABLE NAMES: Natural Sand, Silica Sand, Crystalline Silica (Quartz), Gravel, and Sand

RELEVANT KNOWN USES: Sand and Gravel may be used in the manufacture of bricks, mortar, pavestone, cement, concrete, plaster, stucco, paving material, asphalt, engine sand, traction sand, arena sand, sports turf, athletic facilities, etc.. Sand and gravel aggregate may be distributed in bulk quantities, or in bulk bags.

RESTRICTIONS: Sand and Gravel is NOT sold as a blasting media.

SUPPLIER INFORMATION: THE HAYDEN GROUP
55 JT DRIVE
SHERIDAN, AR. 72150

Emergency Contact: 870-942-0706

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification: CARCINOGENICITY- Category IA
GHS Label Elements: SPECIFIC TARGET ORGAN TOXICITY- Category 2
REPEATED EXPOSURE
EYE DAMAGE/IRRITATION- Category 2A

Hazard Pictograms:



Signal Word:
Hazard Statement:



Danger
May cause damage/cancer to organs(lung) via prolonged, or repeated exposure by inhalation. May cause skin irritation. May cause serious eye damage.

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Precautionary Statement: DO NOT HANDLE UNTIL SAFETY INFORMATION PRESENTED IN THIS SDS HAS BEEN READ AND UNDERSTOOD.

PREVENTION: Do not breathe dust or mists. Do not smoke, eat, or drink while handling this product. Wear protective gloves and clothing, as well as eye protection, and a respirator.

RESPONSE/CONTACT: If exposed or concerned ask for medical advice/attention. If inhaled, remove victim to fresh air and keep in a position comfortable for breathing. If skin and hair are exposed wash skin/hair thoroughly with plenty of water. Take off contaminated clothing and wash before reuse. If in the eyes rinse/flush continuously with water for several minutes. If swallowed, rinse mouth and do not induce vomiting. Wear eye protection and respiratory protection following this SDS, NIOSH guidelines, and other applicable regulations. If unconcerned, exposed, or unwell, or experience irritation of the eyes, skin, mouth, or throat/nasal passage persist; Seek medical attention.

STORAGE/USE: Avoid creating dust when handling, using, or storing this product. Avoid dust if at all possible. Use adequate ventilation when handling this product..

THIS MATERIAL IS NOT TO BE USED AS AN ABRASIVE FOR BLASTING.

DISPOSAL: Dispose of contents/container in accordance with local/regional/national/international regulations.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC): Not Known

SUPPLEMENTAL INFO: Some studies state 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. When sand and gravel is in a state of movement small particles (dust) may become airborne and may contain respirable crystalline silica (quartz). Respirable crystalline silica may cause lung cancer according to IARC and NTP. ACGIH states that it is a suspected cause of cancer.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number/Other Identifiers:

| NAME | % | CAS Number |
|-----------------------------|-----|------------|
| Crystalline Silica (quartz) | >1 | 14808-60-7 |
| Sand and Gravel | >99 | None |

Crystalline Silica (Quartz) is the only known element that may present a health hazard due to dust inhalation. Trace amounts of other naturally occurring elements, mined from the earth, might be detected, however, there are no known ingredients that present any health hazards.

Occupational exposure limits to crystalline silica (quartz) are listed under section 11.

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SECTION 4. FIRST AID MEASURES

DESCRIPTION/ACTION

| | |
|--------------------|--|
| INHALATION: | Immediately move victim to fresh air. |
| EYES: | Immediately flush eye(s) with plenty of water for at least 15 minutes, while holding the eyelid(s) open. Occasionally lift the eyelid(s) to ensure thorough rinsing. Remove contact lenses if present and continue rinsing. Beyond flushing, do not attempt to remove material from the eye(s). Contact a physician if irritation persists, or develops later. |
| SKIN: | Rinse with soap and water. Contact a physician if irritation persists, or develops later. |
| INGESTION: | If swallowed, rinse mouth and do not induce vomiting. If gastrointestinal discomfort occurs, persists, or develops late, seek medical attention. |

SIGNS AND SYMPTOMS OF EXPOSURE

Generally, there are no signs and symptoms of short term exposure to respirable crystalline silica. Long term exposure to respirable crystalline silica, without using approved respiratory masks, may lead to chronic or acute silicosis, and may lead to cancer. The symptoms of chronic silicosis if persistent are shortness of breath, wheezing, cough, sputum production. The symptoms of acute silicosis which can occur with exposures to very heavy concentrations of respirable crystalline silica over very short periods of time, sometimes as short as 6 months, are the same as those associated with chronic silicosis; additionally, weight loss and fever may also occur. Direct skin and eye contact with dust and sand particles may cause irritation by mechanical abrasion. Ingestion of large amounts of the product may cause gastrointestinal irritation and blockage. Inhalation of crystalline silica dust may irritate nose, throat, mucous membranes and respiratory tract by mechanical abrasion. Coughing, sneezing, chest pains, shortness of breath, inflammation of mucous membranes, 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.

| | |
|-------------------|---|
| PHYSICIANS | Provide general supportive measures and treat symptomatically. Keep patient under observation. Symptoms may be delayed. |
|-------------------|---|

| | |
|----------------|--|
| GENERAL | Pre-existing medical conditions that may be aggravated by exposure include disorders of the skin and lung (including asthma and other breathing disorders.) Smoking tobacco is discouraged as this will impair the ability of the airways and lungs to collect and clear themselves of dust. |
|----------------|--|

SECTION 5. FIRE FIGHTING MEASURES

| | |
|----------------------------|---|
| COMBUSTIBLE | NO |
| EXTINGUISHING AGENT | Use extinguishing media compatible with surrounding fire. |
| PROPER PROCEDURES | NONE |

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PROTECTIVE EQUIPMENT

Use protective equipment compatible with surrounding fire.

SECTION 6. ACCIDENTAL RELEASE MEASURES

In the event respirable crystalline silica dust is being generated through movement of product, ventilate or wet down the area with water. Before spill clean up, wet the material with water, or collect the material using a method that does not produce dust such as a High- Efficiency Particulate Air (HEPA) vacuum. Wear appropriate respirators during and following clean up, or whenever airborne dust is present to ensure exposures remain below occupational exposure limits (OELs- refer to section 8.)

SECTION 7. HANDLING AND STORAGE

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

Follow protocols set forth in section 8 of this SDS when handling this product.

When using, or handling this media in a dry state, wear NIOSH approved respirators, and carefully change out clothing, and shower, washing thoroughly with soap and water. Do not breathe dust. Avoid contact with skin and eyes. Do not stand on large piles, for this media could be unstable causing an avalanche.

Use adequate ventilation and an approved dust collection system that will reduce airborne dust levels to below OELs. It is also recommended that NIOSH approved respirators be worn when there is any indication dust may be generated.

Observe good industrial hygiene practices. Promptly remove dusty clothing and laundry before reuse.

Use good housekeeping procedures to prevent the accumulation of dust in the workplace.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

Occupational Exposure Limits

1-OSHA limit= 50mcg/m³ averaged over an 8 hour shift

2- MSHA limit = 10mg/m³

Appropriate Engineering Controls:

Use good ventilation practices if available. Ventilation rates should match the condition application. If possible use enclosures, exhaust fans, dust collectors, wet scrubbers, or other engineering controls to maintain levels below the recommended exposure limits. If exposure limits have not been

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established, use good general practices to maintain airborne levels to an acceptable level.

Exposure Guidelines:

OSHA PEL's, MSHA PEL's and ACGIH TLV's are 8 hour TWA values. NIOSH REL's are for TWA exposures up to 10hr/day and 40 hours per week. Occupational exposure to nuisance dust, and respirable crystalline silica should be monitored and controlled. Terms including "particulates not otherwise classified", "particulates not otherwise regulated", "particulates not otherwise specified", and "inert or nuisance dust" are often used interchangeably; however, the user should review each agency's terminology for differences in meanings.

Individual Protection Measures:

HYGIENE MEASURES:

Always good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking (smoking is discouraged). Routinely wash work clothing and protective equipment to remove contaminants.

EYE/FACE PROTECTION:

Wear safety glasses with shields, or goggles.

HAND PROTECTION:

Use personal protection equipment as required.

BODY PROTECTION:

Use personal protection equipment as required.

OTHER SKIN PROTECTION:

Use personal protection equipment as required.

RESPIRATORY PROTECTION:

When handling or performing work that produces dust, or respirable crystalline dust, or respirable crystalline silica in excess of applicable exposure limits, wear a NIOSH approved respirator that is properly fitted and is in good condition. Respirators must be used in accordance with all applicable workplace regulations.

THERMAL HAZARDS:

Not anticipated. Wear appropriate thermal protective clothing if necessary.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|--------------------------------------|
| Physical state/Appearance: | Solid, particles of granular mixture |
| Color: | Various Colors |
| Odor: | Not applicable |
| Odor Threshold: | Not applicable |
| Ph: | Not available |
| Melting Point: | Not applicable |
| Boiling Point: | Not applicable |
| Flash Point: | Non combustible |
| Burning Time: | Not applicable |
| Burning Rate: | Not applicable |
| Evaporation Rate: | Not applicable |
| Flammability (solid, gas): | Not applicable |
| Lower & Upper Explosive Flammable limits: | Not applicable |
| Vapor Pressure: | Not applicable |
| Vapor Density: | Not applicable |
| Relative Density: | Not available |
| Solubility: | Not available |
| Solubility in water: | Insoluble |
| Particle coefficient: n-octanol/water: | Not applicable |
| Auto-ignition temperature: | Not applicable |
| Decomposition temperature: | Not applicable |
| SADT: | Not available |
| Viscosity: | Not applicable |

SECTION 10. STABILITY AND REACTIVITY

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|--|--|
| REACTIVITY: | The product is stable and non-reactive under normal conditions of use, storage, and transport. |
| CHEMICAL STABILITY: | Material is stable under normal conditions. |
| POSSIBILITY OF HAZARDOUS REACTIONS: | No dangerous reaction known under conditions of normal use. |
| CONDITIONS TO AVOID: | Avoid contact with strong oxidizing agents. |

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INCOMPATIBLE MATERIALS:

Crystalline silica may react violently with strong oxidizing agents, causing fire and explosions.

HAZARDOUS DECOMPOSITION PRODUCTS:

Silica dissolves in hydrofluoric acid producing a corrosive gas : silicon tetrafluoride

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

Acute Toxicity:

Not expected to be acutely toxic.

Irritant/Corrosion:

SKIN: Dust may cause irritation through mechanical abrasion. Not expected to be a skin hazard.

EYES: Direct contact with the eyes may cause temporary irritation through mechanical abrasion.

INHALATION: Repeated inhalation of respirable crystalline silica (quartz) may cause silicosis. Silicosis is irreversible and may be fatal. Silicosis increases the risk of contracting pulmonary tuberculosis. Some studies have suggested that repeated inhalation of respirable crystalline silica may cause other adverse health effects including lung and kidney cancer.

Sensitization:

RESPIRATORY SENSITIZATION: No respiratory sensitizing effects known.

SKIN SENSITIZATION: Not known to be a dermal irritant or sensitizer.

Aspiration Hazard:

Not expected to be an aspiration hazard.

Reproductive Toxicity:

Not expected to be a reproductive hazard.

Symptoms related to physical, Chemical, and toxicological

Characteristics:

DUST: Discomfort in the chest, Shortness of breath, and Coughing.

Carcinogenicity:

Respirable crystalline silica has been classified by IARC and NTP as a known human carcinogen, and classified by ACGIH as a suspected human carcinogen.

| Product/Ingredient name | OSHA | IARC | ACGIH | HTP |
|---|--------------------------|------------------------|-------|--------------------------|
| Crystalline Silica (Quartz) CAS 14808-60-7 | Not Listed Not Listed | 1 Carcinogen to humans | A2 | Known to be a carcinogen |
| Respirable Tridymite and Cristoballite (other forms of crystalline) (CAS mixture) | Not Listed | 1 Carcinogen to humans | - | - |

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Specific Target Organ Toxicity (Acute Exposure)

| Product/Ingredient name | Category | Route of Exposure | Target Organs |
|--|----------|-------------------|------------------------------|
| Crystalline Silica (Quartz) CAS 14808-60-7 | – | Inhalation | Not reported to have effects |
| Respirable Tridymite and Cristoballite (other forms o crystalline) (CAS mixture) | – | Inhalation | Not reported to have effects |

Specific Target organ Toxicity (Chronic Exposure)

| Product/Ingredient name | Category | Route of Exposure | Target Organs |
|---|----------|-------------------|---|
| Crystalline Silica (Quartz) CAS 14808-60-7 | – | Inhalation | May cause damage to organs (Lung through prolonged or repeated exposure). |
| Respirable Tridymite and Cristoballite (other forms of crystalline) (CAS mixture) | – | Inhalation | May cause damage to organs (Lung through prolonged or repeated exposure). |

Potential Chronic Health Effects: General: Prolonged inhalation of respirable crystalline silica may be harmful. May cause damage to organs (lungs) through prolonged, or repeated exposure. There are reports that suggests that excessive exposure to crystalline silica may be associated with autoimmune disorders and other adverse effects involving the kidney. In particular, the incidence of scleroderma, the thickening of the skin caused by swelling and thickening of fibrous tissue, appears to be higher in siliotic individuals.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Not expected to be harmful to aquatic organisms. Discharging sand and gravel dust and fines into waste waters may increase total suspended particulates (TSP) levels that can be harmful to certain aquatic organisms.

SECTION 13. DISPOSAL CONSIDERATIONS

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Crystalline silica (quartz) is not hazardous to the environment. Dispose of waste in accordance with federal, state, and local laws and regulations.

SECTION 14. TRANSPORT INFORMATION

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

DOT HAZARD CLASSIFICATION: NONE

PLACARD REQUIRED: NONE

LABEL REQUIRED: Label as required by OSHA Hazard Communication Standard (29 CFR 1910.1200(f) and applicable state and local laws and regulations.

SECTION 15. REGULATORY INFORMATION

OSHA: Crystalline Silica is NOT listed as a carcinogen.

OSHA Hazard Communication Standard 29 CFR 1910.1200: This product is a "Hazardous Chemical".

TSCA: Not regulated

CERCLA- 40 CFR 302.4: Crystalline Silica (quartz) is NOT classified as a Hazardous waste under the Comprehensive Environmental Response, Compensation, and Liability Act.

RCRA- 40 CFR 261 et seq: Crystalline Silica (quartz) is NOT classified as a Hazardous waste under the Resource Conservation and Recovery Act.

EPCRA: Crystalline Silica (quartz) is NOT an extremely hazardous substance under regulations of 40 CFR part 355, Appendices A and B, and is NOT a toxic chemical subject to the requirements of section 313.

Clean Air Act: Crystalline Silica (quartz) does not contain any Class I or Class II ozone depleting substances.

SARA Title III: Section 311 and 312 - Immediate health hazard and delayed health hazard.

California Prop. 65: WARNING- This product contains crystalline silica which is a known carcinogen to the State of California.

USERS RESPONSIBILITY: The OSHA Hazard Communication Standard 29 CFR 1910.1200 requires that this SDS be made available to employees, or anyone who handle, or may be exposed to this product.

NOTICE/DISCLAIMER:

The information provided in this SDS, as of May 2019, is true and accurate according to data currently available. This SDS does not address safety and hazards that may be present when other materials are mixed with this product., it is the USER's responsibility to research these materials as to health and environment concerns to implement the necessary training and procedures to ensure safe handling of this product. It is also the USER's responsibility to verify the validity of the information provided in the SDS.

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THE HAYDEN GROUP
DISCLAIMER

Information in this SDS is believed to be true and accurate at this time. No guarantee or warranty of any kind is made with respect to information contained herein. We assume no responsibility and disclaim all liability for any defects from the purchase, resale, or exposure to any of our Crystalline Silica (Quartz) products. Customers and users of our Crystalline Silica (quartz) must comply with the applicable safety and health laws, safety and health regulations, and orders, including the OSHA Hazardous Communication Standard.

Occupational Safety and Health Administration (OSHA) Phone number: 1-800-321-OSHA Website:
<http://www.osha.gov>

National Institute for Occupational Safety and Health (NIOSH) Phone number: 1-800-35-NIOSH Website:
<http://www.cdc.gov/niosh>