Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 03/16/2017 Date of Issue: 03/16/2017

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Sand and Gravel

Synonyms Jackson Sand, Lacey Sand, Woodmansie Sand, Aggregate, Washed Sand, Decorative Sand, Mason Sand, Concrete Sand, Natural Sand, Pool Sand, Golf Sand, Asphalt Sand

1.2. Intended Use of the Product

Use of the Substance/Mixture: Sand and Gravel aggregate may be used in the manufacture of bricks, mortar, cement, concrete, plasters, paving materials, and other construction materials. Sand and Gravel aggregate may be distributed in bags, totes, and bulk shipments and may be used for construction, landscaping and decorative use. RESTRICTIONS: Sand and gravel is NOT sold as a blasting media.

1.3. Name, Address, and Telephone of the Responsible Party

Company Clayton Sand Company PO Box 3015 Lakewood, NJ 08701 1-800-662-3044

www.claytonco.com

1.4. Emergency Telephone Number

Emergency Number

: 1-800-662-3044 (8AM-5PM EST M-F - Clayton Sand Company)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the S	ubstance or Mixture
GHS-US Classification	
Carc. 1A H35	0
STOT SE 3 H33	5
STOT RE 1 H37	2
Full text of hazard classes and H-	statements : see section 16
2.2. Label Elements	
GHS-US Labeling	
Hazard Pictograms (GHS-US)	
Signal Word (GHS-US)	: Danger
Hazard Statements (GHS-US)	 H335 - May cause respiratory irritation. H350 - May cause cancer (inhalation). H372 - Causes damage to organs (lungs) through prolonged or repeated exposure (inhalation).
Precautionary Statements (GHS	 P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe dust. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear protective gloves, protective clothing, and eye protection. P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing. P308+P313 - If exposed or concerned: Get medical advice/attention. P312 - Call a poison center or doctor if you feel unwell. P314 - Get medical advice/attention if you feel unwell. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

Version: 1.0

Safety Data Sheet According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions. May cause mechanical irritation of the skin by abrasion. This product is NOT to be used for sand blasting or as a blasting agent.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	GHS-US classification
Natural Sand	(CAS) Not applicable	>= 99	Not classified
Quartz	(CAS No) 14808-60-7	>= 1	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: None expected under normal conditions of use. If symptoms occur: Remove

contaminated clothing. Drench affected area with water for several minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: May cause respiratory irritation. May cause cancer. Causes damage to organs (lungs) through prolonged or repeated exposure (inhalation). Dust may cause mechanical irritation to eyes, nose, throat, and lungs.

Symptoms/Injuries After Inhalation: Irritation of the respiratory tract and the other mucous membranes.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation. Skin contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes. Eye contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: Causes damage to organs (lungs) through prolonged or repeated exposure (inhalation). May cause cancer. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Pre-existing lung diseases such as emphysema or asthma may be aggravated by exposure to dusts. Pulmonary function may be reduced by inhalation of respirable crystalline silica. Also lung scarring produced by such inhalation may lead to a progressive massive fibrosis of the lung which may aggravate other pulmonary conditions and diseases and which increases susceptibility to pulmonary tuberculosis. Progressive massive fibrosis may be accompanied by right heart enlargement, heart failure, and pulmonary failure. Smoking aggravates the effects of exposure.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Safety Data Sheet According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Avoid raising dust.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: None known.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not handle until all safety precautions have been read and understood.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. **Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant. Vacuum must be fitted with HEPA filter to prevent release of particulates during clean-up. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Other Information: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with eyes, skin and clothing. Do not breathe dust. This product is NOT to be used for sand blasting or as a blasting material.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Avoid creating or spreading dust.

Storage Conditions: Store in a well-ventilated place. Keep/Store away from extremely high temperatures (> 870 °C) and incompatible materials.

Incompatible Products: Strong oxidizers. Fluorine. Fluorinated compounds. Acetylene. Ammonia. Hydrogen peroxide. Hydrofluoric Acid.

7.3. Specific End Use(s)

Sand and Gravel aggregate may be used in the manufacture of bricks, mortar, cement, concrete, plasters, paving materials, and other construction materials. Sand and Gravel aggregate may be distributed in bags, totes, and bulk shipments and may be used for construction, landscaping and decorative use. RESTRICTIONS: Sand and gravel is NOT sold as a blasting media.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Particulates r	not otherwise classified (PNOC)	
USA ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³ Respirable fraction
		10 mg/m ³ Total Dust
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m ³ Respirable fraction
		15 mg/m ³ Total Dust

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

OELs for Respirable Crystalline Silica until the mandatory effective dates for the new PEL listed below. After the effective dates the OSHA PEL (STEL) in this table is no longer applicable.

Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (respirable fraction)
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m ³ (respirable dust)
USA IDLH	US IDLH (mg/m ³)	50 mg/m ³ (respirable dust)
USA OSHA	OSHA PEL (STEL) (mg/m³)	250 mppcf/%SiO ₂ +5, 10mg/m ³ /%SiO ₂ +2

OELs from OSHAS's Occupational Exposure to Respirable Crystalline Silica Final Rule, 29 CFR Parts 1910, 1915, and 1926. Effective dates by industry are below the table. These OELs can optionally be implemented immediately in place of the above. Upon each applicable effective date, these OELs become mandatory. Effective date of the standard: June 23, 2016.

Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (respirable particulate matter)
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m ³ (respirable dust)
USA IDLH	US IDLH (mg/m ³)	50 mg/m ³ (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m³)	50 μg/m³

Effective Dates by Industry:

Construction 29CFR 1926.1153 Effective June 23, 2017

General Industry and Maritime 29CFR 1910.1053 / 1915.1053 Effective June 23, 2018 Oil and Gas including Hydraulic Fracturing 29CFR 1910.1053 Effective June 23, 2018

If crystalline silica (quartz) is heated to more than 870°C, it can change to a form of crystalline silica known as trydimite, and if crystalline silica (quartz) is heated to more than 1470°C, it can change to a form of crystalline silica known as cristobalite. The OSHA PEL for crystalline silica as trydimite and cristobalite is one-half of the OSHA PEL for crystalline silica (quartz).

8.2. Exposure Controls

Appropriate Engineering Controls

- : If product needs to be altered (e.g. ground, drilled, sanded, or cut), use wet processing techniques if possible to minimize generation of dust. Emergency eye wash capability should be available in the immediate vicinity of potential exposure. Maintain sufficient mechanical or natural ventilation to assure silica concentrations remain below PEL/TLV. Use local exhaust if necessary. Power equipment should be equipped with properly designed dust collection devices. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.
- **Personal Protective Equipment**

Materials for Protective Clothing

Skin and Body Protection

Respiratory Protection

Hand Protection

Eye Protection

observed.Gloves. Protective clothing. Protective goggles. Where respirable crystalline silica or sand dust is likely to be encountered, wear suitable respiratory protection.



- : Not requied under normal conditions of use. Suitable protective clothing.
- : Not requied under normal conditions of use. Wear protective gloves.
- : In case of excessive dust production: Chemical safety goggles or glasses.
- : Wear suitable protective clothing.
- : Where respirable crystalline silica or sand dust is likely to be encountered, wear suitable respiratory protection. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

9.1. Information on Basic Physical and Chemical Properties		
Physical State	: Solid	
Appearance	: Natural Sand and Gravel - varies light whitish to yellow.	
Odor	: No data available	
Odor Threshold	: No data available	
рН	: No data available	

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Evaporation Rate	:	No data available
Melting Point	:	No data available
Freezing Point	:	No data available
Boiling Point	:	No data available
Flash Point	:	No data available
Auto-ignition Temperature	:	No data available
Decomposition Temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapor Pressure	:	No data available
Relative Vapor Density at 20°C	:	No data available
Relative Density	:	No data available
Solubility	:	No data available
Partition Coefficient: N-Octanol/Water	:	No data available
Viscosity	:	No data available
· · ·		

8.2. Exposure Controls No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Extremely high temperatures (> 870 °C) and incompatible materials. Avoid creating or spreading dust.

10.5. Incompatible Materials: Strong oxidizers. Fluorine. Fluorinated compounds. Acetylene. Ammonia. Hydrogen peroxide. Hydrofluoric acid.

10.6. Hazardous Decomposition Products: Silica compounds. Quartz (silica) will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride. Crystalline silica exists in several forms, the most common of which is quartz. If crystalline silica (quartz) is heated to more than 870°C, it can change to a form of crystalline silica known as trydimite, and if crystalline silica (quartz) is heated to more than 1470°C, it can change to a form of crystalline silica known as cristobalite. The OSHA PEL for crystalline silica as trydimite and cristobalite is one-half of the OSHA PEL for crystalline silica (quartz).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Not classified

Quartz (14808-60-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: May cause cancer.

Quartz (14808-60-7)	
IARC group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs through prolonged or repeated exposure.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Irritation of the respiratory tract and the other mucous membranes.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation. Skin contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes. Eye contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Chronic Symptoms: Causes damage to organs (lungs) through prolonged or repeated exposure (inhalation). May cause cancer. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Pre-existing lung diseases such as emphysema or asthma may be aggravated by exposure to dusts. Pulmonary function may be reduced by inhalation of respirable crystalline silica. Also lung scarring produced by such inhalation may lead to a progressive massive fibrosis of the lung which may aggravate other pulmonary conditions and diseases and which increases susceptibility to pulmonary tuberculosis. Progressive massive fibrosis may be accompanied by right heart enlargement, heart failure, and pulmonary failure. Smoking aggravates the effects of exposure.

SECTION 12: ECOLOGICAL INFORMATION

12.1.	Toxicity
Ecology -	General

: Not classified.

12.2. Persistence and Degradability

Sand and Gravel		
Persistence and Degradability	Not established.	
12.3. Bioaccumulative Potential		
Sand and Gravel		
Bioaccumulative Potential Not established.		
12.4. Mobility in Soil No additional information available		

12.5. Other Adverse Effects

Other Information

: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions. Recycle the material as far as possible.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION 14.1. In Accordance with DOT Not regulated for transport 14.2. In Accordance with IMDG Not regulated for transport 14.3. In Accordance with IATA Not regulated for transport SECTION 15: REGULATORY INFORMATION 15:1. US Federal Regulations

Sand and Gravel

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
	Delayed (chronic) health hazard

Quartz (14808-60-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State Regulations

 Quartz (14808-60-7)

 U.S. - California - Proposition 65 - Carcinogens List
 WARNING: This product contains chemicals known to the State of California to cause cancer.

 Quartz (14808-60-7)

RTK - U.S. - Massachusetts - Right To Know List

RTK - U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - New Jersey - Special Health Hazards Substances List

U.S. New York, Occupational Exposure Limits, Minoral Dusts

U.S. - New York - Occupational Exposure Limits - Mineral Dusts

U.S. - New York - Occupational Exposure Limits - TWAs

RTK - U.S. - Pennsylvania - RTK (Right to Know) List

Particulates not otherwise classified (PNOC) (Not applicable)

U.S. - New York - Occupational Exposure Limits - TWAs

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Other Information :	:	This document has been prepared in accordance with the SDS
		requirements of the OSHA Hazard Communication Standard 29 CFR
		1910.1200

GHS Full Text Phrases:

Carc. 1A	Carcinogenicity Category 1A
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H335	May cause respiratory irritation
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure

The information and recommendations contained herein are based upon data believed to be up to date and correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. Clayton Sand Company and all associated entities accept no responsibility and disclaim all liability for the use of any Clayton Sand Company Safety Data Sheet for any Silica containing products or harmful effects that may be caused by purchase, resale, use or exposure to our silica containing material or products. Customers and users of products containing silica in any form must comply with all applicable health and safety laws, orders or regulations for its use and exposure and insure that they properly determine what laws, rules or regulations specifically apply to their industry wherever they should operate. In particular, they are under an obligation to carry out a risk assessment for any work places where silica containing products are present and to perform adequate risk management measures and procedures in accordance with any applicable law or regulation. They must also insure that they implement all necessary protective measures and engineering controls as required by all applicable laws, regulations and orders.

SDS US (GHS HazCom)