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SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Common Name: Industrial Sand (aggregate can be used for abrasion applications)
Filter Media Sand (aggregate can be used for water filtration)

1.1.1 Substance name: Silica Sand

Chemical name: Sand, Crystalline Silica, Silica Sand, Quartz

CAS No.: 14808-60-7

Formula: Predominately SiO2

Trade name / designation: Sand, Filter Media Sand, Foundry Sand, Frac Sand, Roofing Granules, Traction

Sand, Golf Course and Speciality Sand

1.2 Details of the supplier of the safety data sheet: Texas Quality Products, LLC

P.O. Box 625

Eagle Lake, TX 77434 Fax: 979-234-2645

E-Mail (info@texasqualityproducts.com)

1.3 EMERGENCY TELEPHONE NUMBER: 800.858.3405 (Mon – Fri; 7:00a-5:00p CST)

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture:

Carcinogen - Category 1A

Specific Target Organ Toxicity Single Exposure – Category 3 Specific Target Organ Toxicity Repeat Exposure – Category 1

Eye Irritant - Category 1

2.1.1 Additional information

No additional information available.

- 2.2 Label elements
- 2.2.1 Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard pictograms (GHS-US)





GHS07

Signal word (GHS-US):

DANGER

Hazard statements (GHS-US):

H320 Causes eye irritation.

H335 May cause respiratory irritation.

H350 May cause cancer.

H373 May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US):

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.



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P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash... thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340 Wear protective gloves/protective clothing/eye protection/face protection.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P308+P313 IF EXPOSED or concerned: Get medical attention. P312+P314 Get medical advice/attention if you feel unwell.

P403+P233+P405 Store in a well-ventilate place. Keep container tightly closed. Store locked up.

P501 Dispose of contents/container in accordance to all regulations.

Unknown acute toxicity (GHS-US): Not applicable.

2.3 Other hazards

No additional information available.

SECTION 3. Composition/information on ingredients

3.1 Substances

Substance name: Silica, Quartz

INDEX No: EC No:

REACH Registration No: CAS No: 14808-60-7

Hazardous Ingredients (Specific Chemical Identity; Common Name(s))	CAS#	TLV (Units)	PEL (Units)	% Typical
Silica, Quartz	14808-60-7	0.1 mg/m3 (1) 0.2	10 mg.m3 (3) %SiO2+2 TWA	90 – 100
Aluminum Oxide, fibrous	1344-28-1	10 mg/m3 (3)	0.05 mg/m3 (1) TWA	0 – 4
Potassium	7440-09-7	Unknown	Unknown	0-3

Industrial Sand is made from mined sand which is washed, screened, sized, and dried in a rotary kiln. No chemicals are added to the sand.

PEL: Permissible Exposure Limit established by the Occupational Safety and Health Administration (OSHA)
TLV: Threshold Limit Value established by the American Conference of Government Industrial Hygienists (ACGIH)

3.2 ALTERNATIVE for mixtures

3.2.1 Mixtures: Not applicable.

3.2.2 Additional information: No additional information available.

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SECTION 4. First aid measures

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- 4.1 Description of first aid measures
- General information: Never give anything by mouth to an unconscious person. Obtain medical assistance, if person feels unwell.
- Following inhalation: Remove person to fresh air and keep comfortable for breathing. Dust in throat and nasal passages should clear spontaneously. If breathing difficult, give oxygen. Obtain medical assistance, if irritation persists or later develops.
- 4.1.3 Following skin contact: Wash with soap and rinse skin with water.
- Following eye contact: DO NOT RUB EYES! Rinse cautiously with water for several minutes. If contact lens wearer, remove contact lenses, if present and easy to do. Otherwise, continue rinsing. Beyond flushing, do not attempt to remove contacts or other material from eye(s). Obtain medical assistance, if material is not removed or irritation persists or later develops.
- Following ingestion: If conscious, rinse mouth, DO NOT induce vomiting, Obtain medical assistance, if person feels unwell.
- 4.1.6 Self-protection of the first aider: Not applicable.
- 4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Exposure of large amounts in a short period of time may result in blockage of nasal and respiratory passages.

Symptoms: May cause respiratory tract irritation, sneezing, coughing, burning sensation of throat with constricting sensation of larynx and difficulty in breathing.

Effects: Causes damage to organs through prolonged or repeated inhalation. This product contains crystalline silica. Repeated or prolonged inhalation may damage lungs.

Skin contact: Prolonged contact may cause mechanical skin irritation.

Symptoms: Skin irritation.

Effects: Dust may cause irritation in skin folds or contact in combination with tight clothing.

Eye contact: Eye irritation may result, if particles or dust get in eye.

Symptoms: Redness, pain.

Effects: Particles or dust may cause irritation and abrasion to the cornea.

Ingestion: Swallowing large amounts may cause damage to internal organs.

Symptoms: Abdominal pain.

Effects: Ingestion of large quantities may cause discomfort and/or distress, nausea or vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

Immediately seek medical advice or attention if symptoms are significant or persistent. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis. The symptoms of acute silicosis are those associated with chronic silicosis; additionally, weight loss and fever may occur. The symptoms of scleroderma include thickening and stiffness of the skin, particularly in the fingers, shortness of breath, difficulty swallowing and join problems.

Medical Conditions Generally Aggravated by Exposure: Individual with lung disease (e.g., bronchitis, emphysema, chronic obstructive pulmonary disease) can be aggravated by exposure.

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SECTION 5. Firefighting measures

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5.1 Extinguishing media:

Suitable extinguishing media: None Required. Non-flammable and non-combustible.

5.2 Special hazards arising from the substance or mixture:

Hazardous combustion products: None Determined. Non-explosive in presence of shocks.

5.3 Advice for fire-fighters:

No special equipment required: Fight fire with normal precautions from a reasonable distance. Not flammable. Use normal individual fire protective equipment. Treat for surrounding material.

5.4 Additional information:

None: Hazardous reactions will not occur under normal conditions.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment: Wear suitable protective clothing, gloves and eye/face protection. Use recommended respiratory protection.

Emergency procedures: Thoroughly wet. Collect as any solid. Not flammable. (See SECTION 6.3.1)

6.1.2 For emergency responders

Personal protective equipment: DO NOT BREATHE DUST! Avoid generation of dust during clean-up of spills. Recover the product by vacuuming, shovelling or sweeping. Vacuum must be fitted with HEPA filter to prevent release of particulates during clean-up.

- Environmental precautions: Do not allow to enter sewers/surface or ground water. Dispose of unwanted 6.2 materials and contain properly in accordance with all regulations.
- 6.3 Methods and material for containment and cleaning up
- 6.3.1 For cleaning up: Wet sweep or shovel into containers. Minimize generation of dust. Store away from other materials.
- Other information: No additional information. 6.3.2
- 6.4 Reference to other sections
- 6.4.1 Additional information: See Heading 8. Exposure controls/personal protection. No additional information available.

SECTION 7. Handling and storage

Precautions for safe handling 7.1

7.1.1 Protective measures:

Advice on safe handling: Avoid creating or spreading dust.

Aerosol and dust generation preventions: Store in a manner to prevent the generation or accumulation of dust. Do not use dry sweeping or compressed air for removal of dust. If vacuuming is used, the exhaust air should be properly filtered. Use water to clean surfaces if practical. Excessive handling of sand in a manner that causes the sand particles to abrade one another (rub together) may produce a dust with an increase in the percentage of respirable silica.

Environmental precautions: No specific precautions. Report releases to regulatory authorities if required by local, state and federal regulations.



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7.1.2 Advice on general occupational hygiene

DO NOT EAT, DRINK OR SMOKE in areas where product is used. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Provide accommodations for end-of-shift showers and change areas with separate storage facilities for street clothes, protective clothing and equipment. Keep contaminate clothing and equipment out of clean change area. Wash hands immediately before breaks and at the end of work. Avoid contact with the eyes and skin. Handle in accordance with good industrial hygiene and safety practices.

Practice good housekeeping. DO NOT permit dust to collect on walls, floors, sills, ledges, machinery or equipment. Keep airborne dust concentrations below permissible exposure limits.

7.2 Other precautions: 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 Protective Agency under the authority of the Resource Conservation and Recovery Act (40 CFR § 261). Dispose of in accordance with federal, state and local regulations.

Refer to Occupational Safety and Health Administration Standards 29 CFR Section 1910.134 which includes guidelines for personal protection for occupational exposure to dusts, including those containing crystalline silica. Where exposure to airborne silica is above the PEL, work clothing should be vacuumed before removal. DO NOT shake or blow dust from clothing.

7.3 Additional information: Full documentation can be found at www.cdc.gov/niosh/npptl/topics

SECTION 8. Exposure controls/personal protection

- 8.1 Control parameters
- 8.1.1 Occupational exposure limit that require monitoring at the workplace: Silica Sand, Crystalline

quartz (14808-60-7)

ACGIH TW (mg/m³) 0.025 R

MSHA/OSHA 10 mg/m 3 / (% SiO $_2$ + 2) § R

aluminum oxide, fibrous (1344-28-1)

ACGIH TW (mg/m³) 1 mg/m³

MSHA/OSHA 15 mg/m³ § T, 5 mg/m³ § R

Potassium oxide (12136-45-7)

ACGIH Not applicable MSHA/OSHA Not applicable

8.2 Exposure controls

8.2.1 Personal protective equipment: Workers who are blasting or exposed to the dust remaining in the air from blasting operations must wear NIOSH-certified, type CE, blasting airline respirator with positive pressure blasting helmet for all people in the vicinity of blasting operations. The respirator must cover the wearer's head, neck and shoulders. Comply with OSHA Respiratory Protection standard. Wear eye/face protection. Wear protective gloves/clothing. Additional required equipment includes, but is not limited to: hearing protection, long leather gloves, aprons and safety boots.

Workers in the area who are exposed to the dust from blasting (for example, pouring bags of media into a hopper) must wear, eye protection, and protective gloves/clothing when handling product.









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8.2.2.1 Eye / Face protection:

Suitable eye protection: Protective eye googles.

8.2.2.2 Skin / Body protection:

Hand protection: Impermeable protective gloves.

Body protection: Dustproof clothing and respiratory protection.

8.2.2.3 Respiratory protection: In high dust production use self-contained breathing apparatus.

- Environmental exposure controls: Use ventilation adequate to keep exposures below recommended 8.2.2 exposure limits. Perform routine clean-up using wet methods or HEPA filtered vacuuming to minimize the accumulation of dust. Do not use compressed air to clean as this creates dust in the air. Clean and decontaminate equipment on the worksite. If abrasive blasting; schedule blasting when the least number of workers are at the site. Avoid blasting in windy conditions to prevent the spread of airborne dust.
- 8.2.3 Consumer exposure control: Do not breathe dust. Wear recommended personal protective clothing and equipment; however, a single exposure will not cause serious adverse health effects.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties 9.1

9.1.1 **Appearance**

Physical state: Colour: Odour: Odour threshold: Granular Solid Varies None Not applicable

Pysical Properties	Chemical Characteristics	
pH-value at 20°C (68 °F)	No data available	
Melting point	1710 °C (3110 °F)	
Freezing point	No data available	
Initial boiling point/boiling range	2230 °C (4046 °F)	
Self-ignition temperature	No data available	
Evaporation rate (butylacetate=1)	No data available	
Flammability (solid, gas)	No data available	
Vapour pressure	No data available	
Relative density	No data available	
Relative vapour density at 20 °C	No data available	
Solubility(ies)	Water: Insoluble	
Density	2.65 (approximately)	
Low Pow	No data available	
Low Kow	No data available	
Auto-ignition temperature	No data available	
Decomposition temperature	No data available	
Viscosity	No data available	
Explosive properties	None known	
Oxidising properties	None known	
Explosive limits	No data available	
VOC content	0 g/L VOC	

9.2 Other information:

Physical hazards: No additional information available.



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SECTION 10. Stability and reactivity

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- 10.1 **Reactivity:** No dangerous reaction known under conditions of normal use.
- 10.2 Chemical stability: Stable under normal storage conditions. Keep in dry storage.
- 10.3 Possibility of hazardous reactions: Hazardous polymerization will not occur. No dangerous reaction known under conditions of normal use.
- 10.4 **Conditions to avoid:** No decomposition if used according to specifications.
- 10.5 Incompatible materials: Avoid strong oxidizers. Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, or oxygen difluoride may cause fires. (See SECTION 5.3)
- 10.6 Hazardous decomposition products: Quartz Silica will dissolve in Hydrofluoric Acid and produce a corrosive silicon tetrafluoride.

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Short-term Exposure	Effect
Acute toxicity	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	Not classified
Specific Target Organ Toxicity-Single Exposure	May cause respiratory irritation
Aspiration Hazard	Not applicable
Long-term Exposure	Effect
Germ cell mutagenicity	Not classified
Carcinogenicity	May cause cancer (inhalation)
Reproductive Toxicity	Not applicable
Specific Target Organ Toxicity-Repeated Exposure	Causes damage to lungs through prolonged/repeated exposure
Synergistic/Antagonistic Effects	Not applicable

11.1.1 Substances:

Exposure Routes: Inhalation, skin contact, eye contact, or ingestion.

11.1.2 Symptoms related to physical/chemical/toxicological characteristics:

In case of ingestion: Ingestion of large quantities may cause discomfort and/or distress.

In case of skin contact: May cause mechanical skin irritation.

In case of inhalation: May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated exposure. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

In case of eye contact: Causes eye irritation if particles of dust gets in eye.

11.1.3 Other information: No further relevant information available.

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SECTION 12: Ecological information

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- 12.1 **Toxicity:** No further relevant information available.
- 12.2 Persistence and degradability: Not readily biodegradable. No further relevant information available.
- 12.3 Bioaccumulative potential: Not expected to bioaccumulate. No further relevant information available.
- 12.4 **Mobility in soil:** No further relevant information available.
- 12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- 13.1.1 Product / Packaging disposal: The packaging and material may be land filled; however, material should be covered to minimize generation of airborne dust. This product is not classified as a hazardous waste under the authority of the RCRA (40 CFR § 261) or CERCLA (40 CFR § 117&302). Disposal must be made in accordance with federal, state and local regulations.
- Additional information: Uncleaned packing. 13.2

Recommendation: Disposal must be made in accordance with federal, state and local regulations. Recommended cleansing agent: Non-hazardous waste. Water, if necessary with cleansing agents.

SECTION 14: Transport information

	DOT (U.S.)	TDG (Canada)
UN No.	Not Regulated	Not Regulated
UN Proper shipping name	Not Applicable	Not Applicable
Transport hazard class(es)	Not Regulated	Not Regulated
Packing group	Not Regulated	Not Regulated
Environmental hazards	Not Applicable	Not Applicable

- 14.1 Environmental hazards: Not applicable. Crystalline silica is not known to be an environmental hazard.
- 14.2 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.
- **14.3.1** Overland transport: No additional information available.
- **14.3.2 Sea transport:** No additional information available.
- **14.3.3** Air transport: No additional information available.
- Additional information: Do not handle until all safety precautions have been read and understand. 14.3

Crystalline silica (quartz) is not a hazardous material for purposes of transportation under the U.S. Department of Transportation Table of Hazardous Materials, 49 CFR § 172.101.

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SECTION 15: Regulatory information

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

15.1.1 US regulations: SARA 302/311/312/313 Components listed no chemicals in this material subjected to the reporting requirements of SARA Title III, Section 302, 311, 312 or 313.

RCRA: Crystalline silica (quartz) is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR § 261 et seg.

CERCLA: Crystalline silica (quartz) is not classified substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR § 302.

Emergency Planning and Community Right to Know Act (SARA Title III): Crystalline silica (quartz) is not an extremely hazardous substance under Section 302 and is not a toxic chemical subject to the requirements of Section 313.

FDA: Silica is included in the list of substance that may be included in coatings used in food contact surfaces, 21 CFR § 175.300(b) (3) (xxvi).

NTP: Respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, is classified as Known to be a Human Carcinogen.

OSHA Carcinogen: Crystalline silica (quartz) is not listed.

15.1.2 Canada regulations: Considered to be a D2A and D2B hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations and subject to the requirements of Health Canada's Workplace Hazardous Material Information (WHMIS). This document complies with the WHMIS requirements of the Hazardous Products Act (HPA) and the CPR.

15.1.3 National regulations: Listed on International Agency for Research on Cancer (IARC) and listed as carcinogen on National Toxicology Program (NTP).

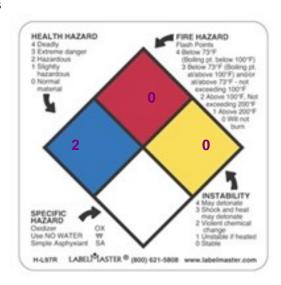
15.1.4 Other: EINECS No.: 231-545-4

EEC Label (Risk/Safety Phrases): R 48/20, R 40/20, S22, S38 IARC: Crystalline Silica (Quartz) is classified in IARC Group 1

Warning! This product contain quartz, a substance known to the State of California to cause cancer.

SECTION 16: Other information

Indication of changes 16.1



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NFPA health hazard : 2 – Prolonged exposure can cause temporary incapacitation or possible residual

injury unless prompt medical attention is given.

NFPA fire hazard : 0 – Materials that will not burn.

NFPA reactivity : 0 – Normally stable, even under fire exposure conditions, and are not reactive with

water.

16.2 HMIS III Rating:

Health : 2* Moderate Hazard – Temporary or minor injury many occur

Flammability : 0 Minimal Hazard Physical : 0 Minimal Hazard

Personal Protection : X

16.3 Abbreviations and acronyms:

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

SDS US (GHS HazCom 2012)

Other information: National, state, provincial or local emergency planning, community right to know or other laws, regulations or ordinances may be applicable—consult applicable national, state, provincial or local laws. An electronic version of this SDS is available at www.texasqualityproducts.com. More information on the effects if crystalline silica exposure may be obtained from the Occupational Safety and Health Administration (OSHA) at 1-800-321-OSHA; website: http://www.osha.gov or from the National Institute for Occupational Safety and Health (NIOSH) at 1-800-35-NIOSH; website: http://www.cdc.gov/niosh.

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NO WARRANTY, EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OF OTHERWISE IS MADE

End of SDS

