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

1.1. Product identifier

Product form : Substance
Trade name : Silica Sand, All Grades
CAS No. : 14808-60-7
MSDS Number : BLC00006
Product group : Commercial product

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation : Sand for specialty applications
Prohibited for use in sandblasting.

1.3. Details of the supplier of the safety data sheet

R. W. Sidley, Inc.
7123 Madison Road
Thompson, OH 44086
USA
440-298-3232

info@rwsidley.com
rwsidley.com

1.4. Emergency telephone number

Emergency number 440-298-3232
7:30 AM to 4:30 PM EST
Monday through Friday

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification
Carc. 1A  H350
STOT SE 3  H335
STOT RE 1  H372

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labelling
Hazard pictograms (GHS-US) :

!  !
GHS07  GHS08

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H335 - May cause respiratory irritation
H350 - May cause cancer (inhalation)
Silica Sand, All Grades  
Safety Data Sheet  
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Precautionary statements (GHS-US):

- **P304+P340 - IF INHALED:** Remove person to fresh air and keep comfortable for breathing
- **P312 - Call a POISON CENTER/doctor if you feel unwell**
- **P308+P313 - IF exposed or concerned:** Get medical advice/attention
- **P314 - Get medical advice and attention if you feel unwell**

- **P264 - Wash hands and forearms thoroughly after handling**
- **P270 - Do not eat, drink or smoke when using this product**
- **P201 - Obtain special instructions before use**
- **P202 - Do not handle until all safety precautions have been read and understood**
- **P280 - Wear eye protection, protective clothing, protective gloves**
- **P260 - Do not breathe dust**
- **P271 - Use only outdoors or in a well-ventilated area**

- **P403+P233 - Store in a well-ventilated place. Keep container tightly closed**
- **P405 - Store locked up**
- **P501 - Dispose of contents/container according to local, regional, national, and international regulations**

**SECTION 3: Composition/information on ingredients**

**3.1. Substances**

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz</td>
<td>(CAS No.) 14808-60-7</td>
<td>99 - 100</td>
<td>Carc. 1A, H350</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3, H335</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT RE 1, H372</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

**2.3. Other hazards**

No additional information available

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

- **First-aid measures general:** If medical advice is needed, have product container or label at hand.
- **First-aid measures after inhalation:** If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
- **First-aid measures after skin contact:** Rinse immediately with plenty of water. Gently wash with plenty of soap and water. Obtain medical attention if irritation persists.
- **First-aid measures after eye contact:** Immediately rinse with water for a prolonged period while holding the eyelids wide open. Seek medical attention if material is embedded in eye. If eye irritation persists: Get medical advice and attention.
- **First-aid measures after ingestion:** If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries: Repeated or prolonged inhalation may damage lungs.
Symptoms/injuries after inhalation: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.
Symptoms/injuries after skin contact: Prolonged contact with large amounts of dust may cause mechanical irritation. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/injuries after eye contact: Redness, pain.
Symptoms/injuries after ingestion: Abdominal pain.
Chronic symptoms: Respiratory difficulties. May cause cancer.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media: None known.

5.2. Special hazards arising from the substance or mixture
Fire hazard: Not flammable.
Explosion hazard: No particular fire or explosion hazard.
Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for firefighters
Precautionary measures fire: Fight fire with normal precautions from a reasonable distance.
Firefighting instructions: Not flammable.
Protection during firefighting: Use normal individual fire protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
General measures: 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.

6.1.1. For non-emergency personnel
Protective equipment: Wear suitable protective clothing, gloves and eye/face protection. Use recommended respiratory protection.
Emergency procedures: Collect as any solid.

6.1.2. For emergency responders
No additional information available

6.2. Environmental precautions
No additional information available

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: 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.

6.4. Reference to other sections
No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Additional hazards when processed: Do not breathe dust.
Precautions for safe handling: Avoid creating or spreading dust.
Hygiene measures: Handle in accordance with good industrial hygiene and safety procedures. Always wash your hands immediately after handling this product, and once again before leaving the workplace. Do not eat, drink or smoke in areas where product is used.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store in a dry, cool place. Keep container tightly closed.
Incompatible materials: In finely divided state: reacts with (strong) oxidizers such as: hydrofluoric acid, chlorine trifluoride, oxygen difluoride, fluorine.
Storage area: Store in dry, cool area.
Special rules on packaging: Keep container closed when not in use.

7.3. Specific end use(s)
Sand for specialty applications

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Quartz (14808-60-7)</th>
<th>ACGIH TWA (mg/m³)</th>
<th>0.025 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td>US IDLH (mg/m³)</td>
<td>50 mg/m³</td>
</tr>
<tr>
<td>USA IDLH</td>
<td>NIOSH REL (TWA) (mg/m³)</td>
<td>0.05 mg/m³</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>(Mineral Dust)</td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Appropriate engineering controls: Ensure adequate ventilation, especially in confined areas. Avoid dust production.
Hand protection: Impermeable protective gloves.
Eye protection: Protective goggles.
Skin and body protection: Handle in accordance with good industrial hygiene and safety practice. Always wash your hands immediately after handling this product, and once again before leaving the workplace. Wear suitable protective clothing. Wash contaminated clothing before reuse.

Respiratory protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of dust are expected to exceed exposure limits.

Consumer exposure controls: Do not breathe dust. Wear recommended personal protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Crystalline solid</td>
</tr>
<tr>
<td>Colour</td>
<td>Natural colour</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>1710 °C (3110 °F)</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>2230 °C (4046 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Self ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>2.65 (approximately)</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Insoluble</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>None known.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>None known.</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

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 normal temperature and pressure.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
None known.

10.5. Incompatible materials
Avoid strong oxidizers.

10.6. Hazardous decomposition products
Quartz (silica) will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>May cause cancer (inhalation).</td>
</tr>
</tbody>
</table>

Quartz (14808-60-7)

<table>
<thead>
<tr>
<th>IARC group</th>
<th>Group 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Toxicity Program (NTP) Status</td>
<td>Known Human Carcinogen</td>
</tr>
</tbody>
</table>

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): May cause respiratory irritation.

Specific target organ toxicity (repeated exposure): Causes damage to organs (lung/respiratory system) through prolonged or repeated exposure (inhalation).

Silica Sand, All Grades (14808-60-7)

Additional information: Repeated or prolonged exposure to respirable crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Acute silicosis can be fatal.

Aspiration hazard: Not classified

SECTION 12: Ecological information

12.1. Toxicity
No additional information available
12.2. Persistence and degradability
Silica Sand, All Grades (14808-60-7)
Persistence and degradability Not readily biodegradable.

12.3. Bioaccumulative potential
Silica Sand, All Grades (14808-60-7)
Bioaccumulative potential Not expected to bioaccumulate.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
No additional information available

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Regional legislation (waste) : Disposal must be done according to official regulations.
Waste disposal recommendations : Non hazardous waste.

SECTION 14: Transport information
In accordance with DOT / TDG / ADR / RID / ADNR / IMDG / ICAO / IATA
14.1. UN number
No dangerous good in sense of transport regulations.
14.2. UN proper shipping name
Not applicable

14.2 Additional information
Other information : No supplementary information available.

Overland transport
No additional information available

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information
15.1. US Federal regulations
Silica Sand, All Grades (14808-60-7)
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. International regulations
CANADA
## Silica Sand, All Grades

### Safety Data Sheet

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<table>
<thead>
<tr>
<th>Quartz (14808-60-7)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the Canadian DSL (Domestic Sustances List) inventory.</td>
<td></td>
</tr>
<tr>
<td>WHMIS Classification</td>
<td>Class D Division 2 Subdivision A - Very toxic material causing other toxic effects</td>
</tr>
</tbody>
</table>

### 15.2.2. National regulations

Quartz (14808-60-7)

| Listed on IARC (International Agency for Research on Cancer) |  |
| Listed as carcinogen on NTP (National Toxicology Program) |  |

### 15.3. US State regulations

Quartz (14808-60-7)

<table>
<thead>
<tr>
<th>WARNING! This product contains Quartz, a substance known to the State of California to cause cancer.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California - Proposition 65 – Carcinogen</td>
<td></td>
</tr>
<tr>
<td>U.S. - Hawaii - Occupational Exposure Limits - TWAs</td>
<td></td>
</tr>
<tr>
<td>U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations</td>
<td></td>
</tr>
<tr>
<td>U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)</td>
<td></td>
</tr>
<tr>
<td>U.S. - Idaho - Occupational Exposure Limits - Mineral Dusts</td>
<td></td>
</tr>
<tr>
<td>U.S. - Illinois - Toxic Air Contaminant Carcinogens</td>
<td></td>
</tr>
<tr>
<td>U.S. - Maine - Chemicals of High Concern</td>
<td></td>
</tr>
<tr>
<td>U.S. - Massachusetts - Right To Know List</td>
<td></td>
</tr>
<tr>
<td>U.S. - Michigan - Occupational Exposure Limits - TWAs</td>
<td></td>
</tr>
<tr>
<td>U.S. - Minnesota - Chemicals of High Concern</td>
<td></td>
</tr>
<tr>
<td>U.S. - Minnesota - Hazardous Substance List</td>
<td></td>
</tr>
<tr>
<td>U.S. - Minnesota - Permissible Exposure Limits - TWAs</td>
<td></td>
</tr>
<tr>
<td>U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour</td>
<td></td>
</tr>
<tr>
<td>U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual</td>
<td></td>
</tr>
<tr>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List</td>
<td></td>
</tr>
<tr>
<td>U.S. - New Jersey - Special Health Hazards Substances List</td>
<td></td>
</tr>
<tr>
<td>U.S. - Oregon - Permissible Exposure Limits - Mineral Dusts</td>
<td></td>
</tr>
<tr>
<td>U.S. - Pennsylvania - RTK (Right to Know) List</td>
<td></td>
</tr>
<tr>
<td>U.S. - Tennessee Occupational Exposure Limits - TWAs</td>
<td></td>
</tr>
<tr>
<td>U.S. - Texas - Effects Screening Levels - Long Term</td>
<td></td>
</tr>
<tr>
<td>U.S. - Texas - Effects Screening Levels - Short Term</td>
<td></td>
</tr>
<tr>
<td>U.S. - Vermont - Permissible Exposure Limits - TWAs</td>
<td></td>
</tr>
<tr>
<td>U.S. - Washington - Permissible Exposure Limits - STELs</td>
<td></td>
</tr>
<tr>
<td>U.S. - Washington - Permissible Exposure Limits - TWAs</td>
<td></td>
</tr>
</tbody>
</table>
Silica Sand, All Grades
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SECTION 16: Other information

NFPA health hazard : 2 - Intense or continued exposure could 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.

HMIS III Rating
Health : 2* Moderate Hazard - Temporary or minor injury may occur
Flammability : 0 Minimal Hazard
Physical : 0 Minimal Hazard
Personal Protection : E

Full text of H- 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 |

SDS US (GHS HazCom 2012)

The above information is believed to be accurate based on the most current data available and current as of the date of this Safety Data Sheet, and is offered in good faith. R. W. Sidley, Inc. makes no warranty, either expressed or implied, with respect to such information, and assumes no liability resulting from its use. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of R. W. Sidley, Inc., it is the user’s obligation to determine the conditions of safe use of the product and the suitability of each product or product combination for their own purposes. R. W. Sidley, Inc. shall not be liable for claims, losses or damages of any third party or for lost profits or incidental or consequential damages.