



Material Safety Data Sheet (MSDS)

Product Name: Silica Sand

Grain Size: < 0.5 mm

CAS Number: 14808-60-7

Formula: SiO₂

Recommended Use: Industrial applications (e.g. glass manufacturing, foundry casting, filtration media)

1. Identification

- **Product Name:** Silica Sand
- **Trade Name:** Quartz Sand
- **Supplier:** Basekim
- **Use:** Industrial – construction, glass, filtration, etc.

2. Hazard Identification

- **Classification:**
Not classified as hazardous under GHS criteria in bulk form.
- **Hazard Statements:**
 - Prolonged inhalation of respirable crystalline silica dust may cause silicosis.

3. Composition / Information on Ingredients

Component	CAS Number	% by Weight
Silicon Dioxide (SiO ₂)	14808-60-7	>99.4%
Iron Oxide (Fe ₂ O ₃)	1309-37-1	<0.1%
Titanium Dioxide (TiO ₂)	13463-67-7	≤0.1%
Aluminum Oxide (Al ₂ O ₃)	1344-28-1	<0.5%
Chromium Oxide (Cr ₂ O ₃)	1308-38-9	0%

4. First Aid Measures

- **Inhalation:** Move to fresh air. Seek medical attention if symptoms persist.
- **Skin Contact:** Rinse with water. No known skin hazards.
- **Eye Contact:** Flush eyes with plenty of water for at least 15 minutes.
- **Ingestion:** Non-toxic but not intended for ingestion. Rinse mouth with water.

5. Fire-Fighting Measures

- **Flammability:** Non-flammable
- **Extinguishing Media:** Not applicable
- **Hazards from combustion:** None
- **Protective Equipment:** Standard firefighting gear



6. Accidental Release Measures

- Avoid generating dust.
- Use water spray or vacuum to collect material.
- Dispose of in accordance with local regulations.

7. Handling and Storage

- **Handling:** Avoid breathing dust. Use in well-ventilated areas.
- **Storage:** Store in a dry, cool place in sealed containers.

8. Exposure Controls / Personal Protection

- **Occupational Exposure Limit (OEL):**
 - OSHA PEL (TWA): 0.05 mg/m³ (respirable crystalline silica)
- **Engineering Controls:** Use dust collection or local exhaust
- **Personal Protection:**
 - Respiratory: Use NIOSH-approved respirator if dust is generated
 - Eyes: Safety goggles
 - Skin: Gloves (optional)

9. Physical and Chemical Properties

Property	Value
Appearance	White/off-white solid
Odor	Odorless
pH	7.0 – 8.0
Boiling Point	2230 °C
Melting Point	1620 °C
Density	2.65 g/cm ³
Bulk Density	1.6 g/cm ³
Solubility in Water	Insoluble
Moisture	≤0.3%
Loss on Ignition (LOI)	<0.2%

10. Stability and Reactivity

- **Stability:** Stable under normal conditions
- **Incompatible Materials:** Hydrofluoric acid
- **Hazardous Decomposition:** None
- **Polymerization:** Will not occur

11. Toxicological Information

- **Acute Toxicity:** Not applicable



- **Chronic Effects:** Prolonged inhalation of fine crystalline silica dust may cause lung disease (silicosis).
- **Carcinogenicity:**
 - IARC: Group 1 – Carcinogenic to humans (respirable crystalline silica)

12. Ecological Information

- **Environmental Impact:** Not hazardous to the environment
- **Mobility:** Not mobile in soil
- **Persistence:** Chemically inert
- **Bioaccumulation:** None

13. Disposal Considerations

- Dispose in accordance with local, regional, and national regulations.
- Avoid creating dust during disposal.

14. Transport Information

- **UN Number:** Not regulated
- **Transport Hazard Class:** Not classified
- **Packing Group:** Not applicable
- **Special Precautions:** Avoid dust generation during transport

15. Regulatory Information

- **GHS Classification:** Not hazardous in bulk
- **OSHA:** Respirable crystalline silica is regulated
- **REACH/TSCA:** All components are listed

16. Other Information

- **Prepared By:** Basekim
- **Disclaimer:** This information is believed to be accurate but does not constitute a warranty. Users are advised to make their own investigations.