



## Material Data Safety Sheet

### Quick Identifier: Silicon

#### I. PRODUCT IDENTIFICATION

<b>Trade Name:</b>	Silicon	<b>Formula:</b>	Si
<b>Synonyms:</b>		<b>Molecular Weight:</b>	
<b>CAS #:</b>	7440-21-3		

#### II. HAZARDOUS INGREDIENTS

<u>Hazardous Components:</u>	<u>OSHA PEL:</u>	<u>ACGIH TLV:</u>	<u>Other Limits:</u>
Silicon	15 mg/m3	10 mg/m3	5 mg/m3 resp.
<b>Sec. 302 (EHS):</b>	No	<b>Sec. 304 RQ:</b> No	<b>Sec. 313:</b> No
<b>HMIS Ratings (0-4): Health:</b>	1	<b>Flammability:</b> 0	<b>Reactivity:</b> 0
<b>HMIS Protective Equipment:</b>	E: Glasses, gloves, dust respirator		

#### III. PHYSICAL DATA

<b>Boiling Point:</b>	2355 – 2600 C	<b>Melting Point:</b>	Approx. 1440
<b>Specific Gravity (H<sub>2</sub>O=1):</b>	Approx. 2.3	<b>Vapor Density (Air=1):</b>	N/A
<b>Vapor Pressure (mm Hg):</b>	N/A	<b>Evaporation Rate:</b>	N/A
<b>% Volatiles by Volume:</b>	N/A	<b>Solubility in H<sub>2</sub>O:</b>	Insoluble

**Appearance and Odor:** Metallic silver, No odor

#### IV. FIRE AND EXPLOSION HAZARDS DATA

**Flash Point/Method:** Not applicable

**Explosive Limits:** LEL: N/A UEL: N/A

**Extinguishing Media:** Class D fire. Use dry chemical, dry sand or O<sub>2</sub> to smother the fire

**Special Fire Fighting Procedures:** Fire may also be isolated and allowed to burn by itself. Do not disturb burning metal while extinguishing the fire.

**Unusual Fire and Explosion Hazards:** None Mentioned.

#### V. HEALTH HAZARD INFORMATION

**Routes of Entry:** Inhalation, Skin and Eyes.

**Target Organs:** N/A

**Carcinogenicity: NTP:** No **IARC Monographs:** No **OSHA Regulated:** No

**LD50/LC50:** No toxicity data recorded.

**Health Hazards (Acute and Chronic):**

**Inhalation:**

**Acute:** May cause abrasive irritation.

**Chronic:** N/A

**Ingestion:**

**Acute:** N/A

**Chronic:** N/A

**Skin:**

**Acute:** May cause abrasive irritation.

**Chronic:** N/A

**Eye:**

**Acute:** Dust and powder may cause abrasive irritation.

**Chronic:** N/A

**Signs and Symptoms of Exposures:**

**Inhalation:**

**Ingestion:**

**Skin:**

**Eye:**

**Medical Conditions Generally**

**Aggravated by Exposure:**

**EMERGENCY AND FIRST AID PROCEDURES:**

**INHALATION:** Remove from dusty area to fresh air.

**INGESTION:** N/A

**SKIN:** No hazard associated with skin contact.

**EYE:** Flush with water to insure no particles remain in the eye.

**VI. REACTIVITY DATA**

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**Stability:** Stable

**Incompatibility (Material to avoid):** Acids (avoid resulting fume) and strong bases

**Hazardous Decomposition Products:** Hydrogen gas

**Hazardous Polymerization:** Will not occur

**Conditions to Avoid:** Avoid generation of airborne dusts.

**VII. SPILL OR LEAK PROCEDURES**

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**Steps to Be Taken in Case Material Is Released or Spilled:** Fine material should be swept up or vacuumed. Avoid using compressed air to maneuver spills or leaks of fine material.

**Waste Disposal Method:** Dispose of in accordance with applicable federal, state and local regulations.

**Hazard Label Information:** Not applicable

**Precautions to Be Taken in Handling and Storing:** No special precautions are required.

**VIII. SPECIAL PROTECTION INFORMATION**

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**Respiratory Protection:** In dusty areas use NIOSH – approved schedule 21C respirator.

**Ventilation: Local Exhaust:** Local for dusty operations.

**Mechanical (General):** N/A

**Protective Gloves:** Recommended during handling.

**Eye Protection:** Recommended wearing safety glasses.

**Other Protective Clothing or Equipment:** Avoid contamination of work clothes.

**Work/Hygienic/Maintenance Practices:** Normal hygienic practices.

## **IX. ADDITIONAL COMMENTS**

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Some of the chemicals listed herein are research or experimental substances which may be toxic, as defined by various governmental regulations. In accordance with Environmental Protection Agency regulations and the Toxic Substance Control Act (TSCA), these materials should only be handled by, or under the direct supervision of a “technically qualified individual”, as defined in 40 CFR 710.2(aa).

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