

# MATERIAL SAFETY DATA SHEETS

## SECTION I. GENERAL INFORMATION

**COMPANY:** Graystar\*LLC  
**ADDRESS:** 9 Simmonsville Road  
Bluffton, SC 29910  
**PHONE:** 843-815-5600

## SECTION II. PRODUCT DESCRIPTION

**Chemical Name and Synonyms:** Silicon Metal (CAS No. 7440-21-3)  
**Formula:** Si

## SECTION III. PHYSICAL DATA

**Appearance and Odor:** Metallic Silver. No odor. 100% solid  
**Specific Gravity:** 2.3  
**Bulk Density:** 75-85 lb/cu ft

**Melting Point:** Approximately: 1440° C  
**Solubility:** Insoluble in Water.  
**Reactivity:** Not reactive with water.

## SECTION IV. FIRE AND EXPLOSION HAZARD DATA

**Combustibility:** Based on combustibility tests, silicon is classified as active. Dust can be readily ignited, propagate flame and generate some pressure and/or and explosion. Lump material is not combustible.

**Extinguishing Media:** Class D fire: Use dry chemical, dry sand or CO<sub>2</sub>.

## SECTION V. REACTIVITY DATA

**Stability:** This product is stable in all sizes.

**Materials to Avoid:** Avoid resulting fumes from acids and strong bases.

**Conditions to Avoid:** Upon contact with hydrofluoric acid, silicon tetrafluoride, a toxic substance, is formed.

## SECTION VI. HEALTH HAZARD DATA

**Know Health Hazards:** Silicon metal is of low toxicity in lump form and represents no health risk when usual safety rules are observed.

**Symptoms of Exposure:** Prolonged exposure to high concentration may irritate eyes, nose and throat. Prolonged exposure may also cause

drying of the skin. Dust of silicon alloys are classified as nuisance dusts by ACGIH \* and OSHA.

**Medical Conditions Aggravated by Exposure:**

Dust allergies, respiratory diseases.

**Emergency and First Aid Procedures:**

EYES - Flush with water for at least 15 minutes to ensure that no particles remain in the eye.

SKIN - Wash with soap and water. Apply moisturizing cream or lotion to avoid skin dryness.

INHALATION - Remove from dusty area to fresh air.

INGESTION - No hazard associated with ingestion.

**Primary Route(s) of Entry:**

Eye Contact and Inhalation:	Yes
Skin Absorption and Ingestion:	No

**After First Aid, seek professional medical assistance.**

**Notes to Physician:**

Silicon metal is of low toxicity. Acute poisoning, caused by handling, is not relevant. Annual physical exam, lung function testing, and chest X-ray are recommended.

**SECTION VII. SPILL, LEAK, AND DISPOSAL**

**INFORMATION**

**Spill Response:**

Fine material should be swept or vacuumed. Do not use compressed air to maneuver dried material. Avoid generation of airborne dust. Wear adequate personal protective clothing and equipment. No problem associated with spills or leaks of lump material.

**Neutralizing Chemicals:**

Not applicable.

**Waste Disposal:**

Dispose of according to applicable federal, state, and local rules for non-hazardous solid waste materials. No special precautions are necessary during repacking. Waste has been determined to be non-hazardous.

**SECTION VIII. EMPLOYEE PROTECTION PROCEDURES**

**Eye:**

Subject to local safety rules. Recommended wearing safety goggles. Eye wash station should be accessible.

**Respiratory:**

Provide adequate ventilation as noted below. Use a NIOSH-MSHA 21-C respirator that properly fits the user.

**Precautions for Maintenance of Contaminated Equip:**

None.

**Labeling:**

No DOT Hazardous Material Label required.

**Toxic Substances Control Act, Section 8(e):**

Report to SIMCALA, Inc. any adverse environmental or health effects attributed to this product.

\* American Conference of Governmental Industrial Hygienists.

**Skin:**

Gloves recommended. Clothing that contacts skin should be changed daily. Barrier creams may be required if skin drying is noted.

Avoid handling procedures that generate airborne dust.

Store in closed containers.

<p style="text-align: center;"><b>Disclaimer</b></p>
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