SAFETY DATA SHEET

MISSISSIPPI SILICON

Section 1 Identification of Product and Supplier

Product Name: Silicon Metal

CAS No.: 7440-21-3

Trade Name(s): Silicon, Silicon Metal, Micronized Silicon Metal, Silicon Metal Powder

Manufacturer: Mississippi Silicon LLC

80 CR 210

Burnsville, MS 38833

Tel: 662-696-2600

Product Code: Not applicable

Emergency Telephone No.: Chemtrec 1-800-424-9300

Product Use: Alloy additive

Restrictions: None identified

Chemical Formula: Varies

Appearance: Grey metallic color

Odor: None

Section 2 Hazards Identification

GHS Classification

Health: Airborne dust generated through the use or handling of the product may result in respiratory tract and/or eye discomfort.

Physical: Material is not known to be a water reactive flammable solid material based on United Nations recognized analytical methods. Dust from this product under certain conditions may be combustible in a dust cloud form.

This product does not create combustible dust when shipped. It is considered not to be used in downstream processes that would create dust.

OSHA Hazard Category: Not Classified

GHS Category: None

GHS Pictogram Label(s)

None

Signal Word

None

Hazard Statements

No known significant effects or critical hazards.

Precautionary Statements

*Avoid breathing dust, as it may irritate and dehydrate mucous membranes.

*Keep away from oxidizing agents and halogen acids.

*Airborne dust under certain conditions may be combustible.

*Avoid skin contact—Dust may irritate skin.

*Avoid eye contact—Dust may irritate and lead to dryness of the eyes.

*Do not ingest.

Section 3 Composition/Information on Ingredients

Ingredient	CAS No#	Percent %
Silicon	7440-21-3	98-99.5

Section 4 **First Aid Measures**

Inhalation: Remove victim to fresh clean air.

Ingestion: Seek immediate medical attention.

Skin Contact: Wash skin with soap and water.

Eye Contact: Flush eyes with water for 15 minutes.

**Seek immediate medical attention if any symptoms persist.*

Section 5 **Firefighting Measures**

Dry Silicon Metal Dross in the form of lumps or granules (Bottom Screen > 200 Mesh [0.074 mm]) is not combustible.

Extinguishing Media: Dry powder, dry sand, or C02

Special Information: Silicon Metal Dross airborne dust may under certain conditions cause dust explosions. Wear appropriate Personal Protective Equipment (See Section 8).

Section 6 **Accidental Release Measures**

Use collection methods that minimize creation of airborne dust. High efficiency vacuuming is recommended to recover spilled dry dust. Wet product must be kept away from dry, and must not be stored in sealed containers.

Section 7 **Handling and Storage**

Handling: Prevent the creation of airborne dust. Avoid ignition sources. Wear appropriate personal protective equipment. Inert atmosphere recommended when sizing to minus 20 mesh or lower.

Storage: Store in well ventilated areas. Store away form acids and bases.

Section 8 **Exposure Controls and Personal Protection**

Airborne Exposure Limits:

Based on an 8 Hour TWA:

Component	*OSHA PEL*	*ACGIH TLV*
Silicon	TWA 15 mg/m3 (total) TWA 5 mg/m3 (resp)	TWA 10 mg/m3 (total)

Ventilation System:

Local exhaust suggested in any processing areas. Ensure good ventilation.

Personal Respirators (NIOSH Approved):

Use an appropriate filtering respirator when ay airborne contaminates reach or exceed the Permissible Exposure Limit (PEL). In poorly ventilated areas, such as confined spaces, a self-contained breathing apparatus or a clean air supplied respirator should be worn.

Skin Protection:

Avoid any contact with skin. Wear appropriate gloves.

Eye Protection:

Avoid any contact with eyes. Wear appropriate eye protection, and have access to eye wash stations.

Other Control Measures:

Do not breathe respirable dusts.

Section 9 Physical and Chemical Properties

Appearance: Silvery grey metallic solid.	Melting Point: 1410 C
Odor: None	Freezing Point: Not available
Solubility: Insoluble in water	Flash Point: Not available
Specific Gravity: 2.3	Flammability (solid): No ignition
pH: Not available	Vapor Density (Air = 1): Not available
% Volatiles by Volume @ 21C (70F): Not available	Vapor Pressure (mm Hg): Not available
Boiling Point: Not available	Evaporation Rate (BuAc = 1): Not available

Section 10 Stability and Reactivity

Stability: Stable under normal temperatures and dry conditions.

Conditions to Avoid: Avoid sparks and hot work (e.g. welding and grinding etc.) in areas with high concentrations of airborne dust.

Incompatibilities: Moisture, strong oxidizing agents, and halogen acids. Reacts rapidly with hydrofluoric and nitric acid, as well as, molten alkali.

Hazardous Polymerization:

Has not been observed.

Section 11 **Toxicological Information**

Material is not known to be toxic.

Section 12 **Ecological Information**

Environmental Fate:

Not currently known

Eco-toxicological Fate:

Not currently known

Section 13 **Disposal Considerations**

Recovered material should be recycled, if possible.

Ensure the material is disposed of in accordance with all Federal, State and Local regulations.

Section 14 **Transport Information**

***Silicon Metal minus 325 mesh with the composition as described in section 3 has been tested in accordance with the Code of Federal Regulations, Title 49, and the United**

Nations Transport of Dangerous Goods — Manual of Tests and Criteria, Fifth Edition (2009), and has passed the test. Therefore, Silicon Metal is not classified as a Division 4.3 dangerous when wet product.

Section 15 Other Regulatory Information

DOT 49 CFR	IATA Air	IMDG Vessel	ADR
Not Regulated for Transportation	Not Regulated for Transportation	Not Regulated for Transportation	Not Regulated for Transportation

TSCA Listed: YES

Section 16 Other Information

NFPA Ratings *estimated*	HMIS Ratings:
Health - 1	Health - 1
Flammability - 0	Flammability - 0
Reactivity - 1	Physical Hazard - 1

All information, recommendations, and suggestions, appearing herein concerning our products are based on data believed to be accurate and reliable. Since the actual use by others is beyond our control, it is the user's responsibility to determine the suitability of the product for its use and to adopt such safety precautions as may be necessary. Since the conditions of use are not under our control, Mississippi Silicon disclaims all liability with respect to the use of any material supplied by Mississippi Silicon.