MATERIAL SAFETY DATA SHEET

Issued Date: 2025/01/01

Section I. Chemical Product and Company Identification

- ***Chemical Name:*** Silicon Metal
- ***Synonym:*** Silicon Metal
- ***CAS Number:*** 7440-21-3
- ***Chemical Formula:*** Si

Section II. Composition and Information on Ingredients

Material	CAS#	%	OSHA	ACGIH
Silicon	7440-21-397-90%		10mg/m³	Total Dust 10mg/m³.
Aluminum	7429-90-5	<1%	15mg/m³	Total Dust 5mg/m³
Iron Oxide Fummed	7439-89-6	<1%	10mg/m³	Total Dust 10mg/m³

Section III Hazards Identification:

- The substance has been listed in <International Maritime Dangerous Goods Code>. But according to the special regulation of Item 223, Column 6 in IMDGS, the substance is not up to the definition 4.3 by test.

Section IV. First Aid Measures

- In case of contact with skin, flush with soap and water. In case of contact with eyes, immediately flush with copious amounts of water for at least 15 minutes. It has no other harm for human.

Section V. Fire and Explosion Data

- ***Flammability:*** Non-Flamable
- ***Flash Points:*** Not Applicable
- ***Auto-Ignition:*** Dust Layer Approx. 1650°F (900°C)
- ***Flammable Limits:*** Not Applicable
- ***Extinguishing Media:*** Class D Fire: Use dry powder, dry sand, or carbon dioxide to smother Fire.
- ***Fire Fighting Procedure:*** Fire may also be isolated and allowed to burn itself out. Do not disturb burning metal while extinguishing the fire.

Section VI. Accidental Release Measures

- ***Spill Or Leak Procedures:*** Utilize recommended protective clothing and equipment. Clean spills in a manner that does not disperse dust into the air. Spill area can be washed with water. Collect wash water for approved disposal. Keep from entering water or ground water

Section VII. Handling and Storage

- ***Storage Temperatures:*** Keep in a tightly closed container. Protect against physical damage. Store in a cool, dry, well ventilated area. Incompatible with strong acid and strong oxidizing agents.
- ***Shelf Life:*** Unlimited in tightly closed container.
- ***Special Sensitivity:*** None
- ***Handling/Storage Precautions:*** Wear protective gloves, safety glasses. Avoid generating dust..

Section VIII. Exposure Controls/Personal Protection

- ***Eye Protection:*** Safety glasses or goggles.
- ***Ventilation:*** Use local ventilation if dusting is a problem, to maintain air levels below the recommended exposure limit.
- ***Additional Protective Measures:*** In case of spill, sweep, scoop or vacuum, store into a dry, clean lidded container for disposal.

Section IX. Physical and Chemical Properties

- ***Physical Form:*** Solid
- ***Color:*** Black
- ***Odor:*** Odorless
- ***Molecular Weight:*** 28.08
- ***Boiling Point:*** Not Applicable
- ***Melting/Freezing Point:*** 1440°C
- ***Solubility In Water:*** Insoluble
- ***Specific Gravity:*** 2.3

Section X. Stability And Reactivity

- ***Stability:*** Stable
- ***Hazardous Polymerization:*** Will Not occur
- ***Incompatibilities:*** Acids and strong bases
- ***Instable Conditions:*** Excessive temperatures (see Incompatibilities).
- ***Decomposition Temperature:*** N/A
- ***Decomposition products:*** N/A

Section XI. Toxicological Infomation

- ***Chronic Toxic Effects:*** This product has no known chronic effects. Repeated or prolong exposure to this compound is not known to aggravate medical conditions.

Section XII. Ecological Information

- ***Ecotoxicity:*** Not available at this time.。

Section XIII. Disposal Considerations

- ***Waste Disposal Method:*** Waste disposal should be in accordance with existing federal, state and local environmental regulations. •

Section XIV. Transportation Information

- ***Proper Shipping Name:*** Silicon Metal
- ***Transport information***: Not regulated by IMO/IMDG.

Section XV. Regulatory Information

- ***Determination of explosives:*** The substance presents no explosive..
- ***Determination of flammability:*** According to “Recommendation on the Transport of Dangerous Goods, Manual of Test and Criteria 33.4.1.4, the rate releasing hydrogen in water is 0.1L/Kg.h, so it does not belong to Class 4.3 (Flammable solid).
- ***Determination of oxidizing substances:*** The substance does not react vigorously with reducing agent, so it does not belong to oxidizing substance.
- ***Determination of toxic & infections substances:*** The substance does not belong to Class 6.1 (Toxic substance).
- ***Determination of radioactive materials:*** The substance does not belong to Class 7 (Radioactive material).
- ***Determination of corrosives:*** The substance does not belong to Class 8 (Corrosive).
- ***Determination of other dangerous properties:*** The substance has no other dangerous properties..

Section XVI. Other Information

- ***References:*** Not available.
- ***Other Special Considerations:*** Not available
- ***Last Updated:*** 2025.01.01

The above information is believed to be correct but does not purport tobe all inclusive and shall be used only as a guide. The information is this document is based on the present state of our knowledge and is applicable to the prodout with redard to appropriate safety precautions. It does nott represent any guarantee of the properties of the product.