



**MATERIAL SAFETY DATA SHEET**

# Silicon Metal Powder

Issued by Zhixin New Materials. Prepared in line with Regulation (EC) No. 1272/2008.

## 1. Product and Company Identification

**Product name:** Silicon Metal Powder

**Supplier:** Zhixin New Materials Co., Ltd.

**Emergency contact:** Jack, +86 19574989725

## 2. Composition / Information on Ingredients

Chemical Name	Composition (%)	CAS No.
Si	99.08	7440-21-3
Fe	0.45	7439-89-6
Al	0.37	7429-90-5
Ca	0.10	7440-70-2

Components contributing to the hazard: none. The product does not necessarily contain all these compounds in every batch.

## 3. Hazards Identification

**Classification:** According to Regulation (EC) No. 1272/2008 — not classified as dangerous.

**Routes of exposure:** Skin, eye contact, inhalation, ingestion.

**Health hazards:** Dust generated during production and handling may cause skin, eye and respiratory tract irritation. Do not swallow.

**Environmental hazards:** No known significant influence or harm.

**Fire & explosion:** This product is not a flammable dangerous good.

## 4. First Aid Measures

**Inhalation:** Remove person to fresh air. If symptoms persist, seek medical attention.

**Skin contact:** Take off contaminated clothes and rinse with flowing water.

**Eye contact:** Flush eyes with plenty of clean water. If symptoms persist, seek medical attention.

**Ingestion:** Wash out mouth with water and drink plenty of water.

## 5. Fire-Fighting Measures

This product is not flammable and will not support flame. It does not promote combustion of other materials.

## 6. Accidental Release Measures

**Personal precautions:** See sections 7 and 8.

**Environmental precautions:** Avoid emission of dust.

**Methods of cleaning up:** For large amounts, preferably use dry methods while avoiding dust exposure. Do not empty material into drains, sewers or water courses, as the material hardens in contact with water.

## 7. Handling and Storage

**Technical measures:** Follow common procedures for handling industrial powders, with attention to suppression of dust and spillage to avoid unnecessary exposure. Store in dry conditions, preferably above ground, protected by shrink-wrapping or in a bulk silo.

**Safe handling:** No particular precautions.

**Incompatible products:** Contact with water or water vapor during storage will hydrate the product, causing lumps and affecting performance.

**Packaging materials:** No special safety restrictions; packaging per applicable national standards.

## 8. Exposure Controls / Personal Protection

**Engineering measures:** Mechanical ventilation is recommended wherever feasible for dust evacuation during handling operations (discharging, mixing, conveying, packing, etc.).

**Personal protection:** Wear dust-proof goggles whenever there is a risk of powder entering the eyes. Protective clothing is recommended, including waterproof gloves and boots. Use suitable respiratory protection when personal exposure may approach or exceed stated limits.

## 9. Physical and Chemical Properties

<b>Physical state</b>	Solid
<b>Form</b>	Powder
<b>Colour</b>	Dark gray
<b>Odour</b>	None
<b>Melting point</b>	1420 C
<b>Flash point</b>	Not applicable
<b>Solubility</b>	Insoluble in nitric acid and hydrochloric acid
<b>Bulk density</b>	2300 kg/m <sup>3</sup>

## 10. Stability and Reactivity

**Stability:** Stable.

**Hazardous decomposition products:** None.

## 11. Toxicological Information

**Acute toxicity:** None.

**Local effects:** None.

## 12. Ecological Information

**Ecotoxicity:** No known significant effects or critical hazards.

**Biodegradability:** Not applicable.

**Other harmful effects:** No known significant effects or critical hazards.

## 13. Disposal Considerations

Consult relevant national and local regulations before disposal. Do not discard at will; recycle and handle through qualified or licensed units. Avoid or minimize dispersion or entry of waste into soil.

## 14. Transport Information

<b>Mode</b>	<b>Classification</b>
Overland transport (ADR/RID/GGVS/GGVE)	Not classified

Inland waterway transport (ADN/R)	Not classified
Sea transport (IMDG/GGVSee)	Not classified
Air transport (ICAO-TI / IATA-DGR)	Not classified

## 15. Regulatory Information

All workers in the plant and others involved should be protected in accordance with applicable law.

## 16. Other Information

All appropriate control measures should be adopted to avoid accidents. The information herein is believed to be correct but is provided without warranty; users should satisfy themselves that the product is suitable for their intended use.

---

Zhixin New Materials | A309-AM33, Rongchao Economic and Trade Center, No. 4028 Jintian Road, Futian District, Shenzhen, China | [www.siliconmetalsupplier.com](http://www.siliconmetalsupplier.com)