



LINYI KEMELE CO., LTD

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Material Safety Data Sheet Silica Fume MSDS

Section1 : Identification of the Product and Supplier

Product Name: Microsilica/ Silica Fume
Product Application:

- Concrete, Production of Mortars and Castables
- Production of Ceramic and Refractory Products.
- Oil Well Grouting
- Repair Products
- Shotcrete

Manufacturer And Contact: Kemele Co.,LTD
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276000
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Tel: 0535-2686808

Section 2 : Hazards Identification

Classification of the substance: Microsilica/ Silica Fume may contain small amounts of crystalline quartz (< 0.5 %). The amount of respirable crystalline silica in the product is below 0. 1 % and does not trigger a hazard-classification

Hazard symbol/Hazard pictogram: N/A (not applicable)
Symbol letter/Indication of danger: N/A (not applicable)
Signal word: N/A (not applicable)
R-/H-phrases: N/A (not applicable)
S-/P-phrases: N/A (not applicable)

Section 3 : Composition/ Information on Ingredients

Item	wt. %	CAS Registry #
Silicon Dioxide (SiO ₂) amorphous	> 85% ± 1%	69012-64-2
Carbon (C)	< 5%	7440-44-0
Aluminum Oxide (Al ₂ O ₃)	< 0. 8%	1344-28- 1
Magnesium Oxide (MgO)	< 5%	1309-48-4
Calcium Oxide (CaO)	<0.8%	1305-78-8
Iron Oxide(Fe ₂ O ₃)	< 1%	1309-37- 1
Sodium Oxide (Na ₂ O)	< 1%	1313-59-3
Potassium Oxide (K ₂ O)	< 1. 3%	12136-45-7
Silicon Dioxide (SiO ₂) Crystalline	<0.5%	14808-60-7



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Above is Elemental analysis of Microsilica/Silica Fume. The manufacturer can provide a more detailed analysis, including other trace elements.

Section 4 : First Aid Measures

Inhalation:	Remove exposed person from dusty area. Fresh air.
Skin contact:	Wash contaminated skin with water and/or mild detergent
Eye contact:	Rinse eyes with water/saline solution. If discomfort persists, obtain medical attention.
Ingestion:	Remove the person affected from dust exposed area. See inhalation.

Section 5 : Fire Fighting Measures

Microsilica is not combustible and the dust presents no danger of explosion.

Extinguishing media: Not applicable (if involved in fire: cool with water).

Flash Point: Not applicable

Section 6 : Accidental Release Measures

Contain spills or leaks. Transfer spilled material into an appropriate container. Collect spilled material using a vacuum cleaner or wash down with water. Do not use compressed air to maneuver dried material. Avoid generation of airborne dust.

Section 7 : Handling and Storage

Handling: Avoid handling that generates airborne dust.

Storage: Store in closed containers. Store away from hydrofluoric acid and fluorides.

Section 8 : Exposure Controls/ Personal Protection

Eye protection, eye flushing facilities and protective gloves are recommended. Ensure adequate ventilation. Wear an appropriate particulate respirator in accordance with 29 CFR 1910. 134 or CSA Standard Z94.4-M1982 for dust exposure that may exceed exposure limits. If adequate ventilation is not possible, a self-contained breathing apparatus or an air supplied respirator is recommended.

Section 9 : Physical and Chemical Properties

Physical State:	Ultrafine amorphous powder (respirable dust), dust forms agglomerates
Color:	Light to dark gray
Odor:	Odorless
Solubility (Water):	Insoluble to slightly soluble
Melting Point (°C):	Approx. 1230
Solubility (Organic solvents):	Insoluble to slightly soluble
Specific Gravity (water= 1):	2.2-2.3
Particle size (μm):	Approx 0.3
pH:	6.0-9.0



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Section 10: Stability and Reactivity

Stability:	Microsilica is stable and does not react with water
Materials to Avoid:	Avoid contact with hydrofluoric acid and fluorides
Hazardous Reactions:	Microsilica reacts with hydrofluoric acid (HF) forming toxic gas (SiF ₄)
Hazardous Decomposition Products :	Prolonged heating above 500°C (930°F) will convert amorphous silica to the crystalline phases.

Section 11: Toxicological Information

Acute Effects:

Ingestion:	Dust from Microsilica may irritate and dehydrate mucous membranes.
Inhalation:	Dust from Microsilica may irritate and dehydrate mucous membranes.
Skin Contact:	Dust from Microsilica may cause irritation and dehydration.
Eye Contact:	Dust from Microsilica may cause irritation and dehydration.

Chronic Effects:

Microsilica dust may contain impurities of crystalline quartz (<0.5%). Inhalation of

Microsilica dust is considered to entail minimal risk of pulmonary fibrosis (silicosis). Cases of lung fibrosis have been reported among workers exposed to amorphous silica in the ferrosilicon industry. The lung changes have either been transient or may have been caused by simultaneous exposure to crystalline silica (quartz).

Heating Microsilica above 500°C can result in the formation of crystalline SiO₂-modifications (Cristobalite/Tridymite) which may cause silicosis. The formation rate increases with increasing temperature. Periodic health examinations of persons exposed to the dust are recommended to include: pulmonary examination, spirometry and possibly x-ray.

Section 12: Ecological Information

Microsilica is not characterized as dangerous for the environment.

Section 13: Disposal Considerations

Reuse all products when possible. Dispose of waste Microsilica according to applicable federal, state and local rules for non-hazardous solid waste materials. No special precautions are necessary during repacking. Microsilica is not a listed RCRA Hazardous Wastes (40CFR 261).

Section 14: Transport Information

According to IMDG/IMO, it's not dangerous cargo.

According to IATA DGR, it's "NOT RESTRICTED, AS PER SPECIAL PROVISION A3"

DOT (DEPARTMENT OF TRANSPORTATION)



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Proper Shipping Name : Not regulated
Hazard Class : Not regulated
I.D. Number and Initials : Not regulated
Packing Group : Not regulated
Label(s) : Not regulated

This product can be shipped by Sea/Air/Rail

Section 15: Regulatory Information

OSHA - Hazardous by definition of hazardous communication standard (29 CFR 1910.1200)

TSCA (Toxic Substance Control Act):

Components of this product are listed on the TSCA Inventory CERCLA (Comprehensive Response Compensation, and Liability Act): Microsilica is not listed in 40 CFR 302.4

RCRA (Resource Conservation/Recovery Act): Microsilica is not a listed hazardous waste. SARA TITLE III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories: Immediate Health, Delayed Health.

313 Reportable Ingredients: None.

CALIFORNIA PROPOSITION 65:

This product contains chemical(s) known to the State of California to cause cancer: Silica, crystalline

Section 16: Other Information

APPLICATION OF MICROSILICA:

For use in refractory compositions, concrete and other systems containing hydraulic cement. Literature references are available upon request from the manufacturer.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

Date: January 1, 2023

End of MSDS