

## MATERIAL SAFETY DATA SHEET

### 1. Product Information

Product Name: Fumed Silica  
CAS Number: 112945-52-5

Chemical Name: Silicon Dioxide  
Chemical Family: Hydrophobic Silica

### I. Summary of Hazards

May cause discomfort to the eyes, skin and respiratory tract. In case of contact, flush eyes with water and wash skin with soap and water. If inhaled and breathing becomes difficult, remove to fresh air. If discomfort persists call a physician. See section V for additional information on health hazards.

### II. Hazardous Components

A new CAS number, 112945-52-5, has been assigned to Amorphous Fumed Silica to distinguish it from crystalline silica. According to EPA this product meets TSCA Inventory as Silica, CAS # 7631-86-9.

NOTE: The OSHA PEL is 15 mg/m<sup>3</sup> (total)/5 mg/m<sup>3</sup> (respirable) for "Particulates Not Otherwise Classified". The ACGIH TLV is 10 mg/m<sup>3</sup> (total) / 3 mg/m<sup>3</sup> (respirable). Risks include reduced visibility and physical irritation.

NAME	CAS No.	%	PEL	EXPOSURE LIMITS		OTHER
				TLV		
1. Silica-Amorphous, Fumed	112945-52-5	> 99.8	See Note	See Note		None

III No carcinogenicity designated by NTP, IARC, OSHA or others.

### IV Chemical and Physical Properties

**Boiling point:** Not applicable    **Vapor Pressure:** Not applicable    **Melting Point:** 1700°C    **Vapor Density:** Not applicable    **Solubility in Water:** Insoluble    **Specific gravity:** Approx. 2.2    pH: 3.6 - 4.5    **Evaporation Rate:** Not applicable    **Appearance:** White, fluffy powder with no odor.

### V Health Hazard Data and First Aid Procedures

Amorphous silica, unlike crystalline silica, is considered biologically benign.

Chemical Name	TOXICITY DATA	
	LD50	LC50
Silica-Amorphous, Fumed	>10000 mg/kg rat-ori	>0.139 mg/1/4h rat

**Eye contact:** May cause eye discomfort. In case of contact, flush eyes with water. Call a physician if discomfort persists. **Skin contact:** May cause drying of the skin. In case of contact, wash skin with soap and water. Call a physician if drying persists. **Skin absorption:** Not expected to be absorbed through skin. In case of contact flush skin with soap and water. **Inhalation:** May cause physical discomfort to the respiratory tract. If inhaled and discomfort occurs, remove to fresh air. If discomfort persists, call a physician. **Ingestion:** Not expected to be toxic by ingestion. **Chronic effects of overexposure:** No chronic (long term) effects are known for humans. **Other health effects:** Medical conditions which may be aggravated by exposure to this product include: Conjunctivitis of the eye, dermatitis of the skin, asthma and respiratory diseases.

### VI Exposure Control Measures

**Eye protection:** Eye protection is recommended. **Protective gloves:** General use chemical resistant gloves are recommended to protect the skin from drying and irritation. Lotions and barrier creams are also recommended to prevent drying of the skin. **Respiratory protection:** Atmospheric levels should be maintained below the exposure limits listed in Section III by using engineering controls. If not feasible, use a NIOSH approved respirator. **Other protection:** If repeated or prolonged skin contact or contamination is likely, protective clothing should be worn. **Ventilation:** Provide general and/or local exhaust ventilation to maintain airborne levels below the exposure limits in Section III. Refer to "Industrial Ventilation" by ACGIH for a manual of recommended practices. **Personal hygiene/work practices:** Establish good personal hygiene and work practices. Always wash hands and face before eating, drinking or smoking.

### VII Fire and Explosion Hazard Data

**Flash Point (Method Used):** Non-flammable    **Flammable limits:** Lower: None    Upper: None    **Extinguishing media:** Use extinguishing media appropriate for surrounding fire conditions. **Fire fighting instructions:** Evacuate enclosed and surrounding areas. If smoke and fumes cannot be avoided, use proximity suit and self-contained breathing apparatus. **Unusual fire and explosion hazards:** Proper safety measures such as electrical grounding should be taken to prevent a static electrical charge when handling near flammable or explosive areas. Refer to NFPA #77-1993.

### VIII Reactivity data

**Stability:** Decomposition begins at >2000C.    **Incompatibility:** None - product is inert.    **Hazardous products of decomposition:** None known. **Hazardous polymerization:** Will not undergo hazardous polymerization.

## **IX Environmental & Disposal Information**

**General:** CERCLA/SARA requires notification to the appropriate Federal state and local authorities of releases of hazardous or extremely hazardous quantities equal to or greater than the Reportable Quantities (RQs) in 40 CFR 302.4 and 40 CFR 355. SARA Title 313 requires submissions of annual reports of releases of toxic chemicals that appear in 40 CFR 372. Components present in this product at a level which could require reporting under the statute are: "None" **Action to take for spills/leaks:** See Section V and VI for hazards and exposure controls. For small spills, sweep or shovel solids into proper container for disposal. **Disposal method:** Dispose of in accordance with all local, state and federal regulations. Contact us at (334) 443-4000, ext. 4287 or ext. 4427 for assistance with disposal requirements.

## **X. Precautions For Safe Handling, Storage and Use**

Store in a dry place to protect product from loss of performance. Avoid prolonged inhalation of dust. Mixture with water on a surface will produce a slippery surface. When working with this product, measures to prevent electrostatic charging should always be taken when handling near flammable or explosive atmospheres.

**XI. Shipping Information** - Not regulated for transportation purposes.

**XII. Additional Information** - The primary physiological effect of this product is a drying of the skin, which can be eliminated by using the exposure control measures recommended in Section VI and by applying lotions and barrier creams to the skin.

THIS MATERIAL IS IN COMPLIANCE WITH THE TOXIC SUBSTANCES CONTROL ACT