

Material Safety Data Sheet



Cab-O-Sil® Untreated Fumed Silica M-5

Section 1. Chemical Product and Company Identification

Common/Trade name : Cab-O-Sil® Untreated Fumed Silica M-5
Supplier : L.V. Lomas Limited/Limitée
99 Summerlea Road
Brampton, Ontario L6T 4V2 905-458-1555
Synonym : Not available.
Chemical name : Synthetic Amorphous Silicon Dioxide, Crystalline Free.
Chemical family : Oxide.
Material Uses : Used for rheology control, reinforcement, and free flow agent in silicone rubber, coatings, adhesives and other applications.
Manufacturer : Cabot Corporation
700 E. U.S. Highway 36
Tuscola, IL 61853-8643
U.S.A. 217-253-3370
Code : CABM5
CI# : Not applicable.
CAS # : 112945-52-5 (Specific) 7631-86-9 (General). All components are listed on DSL (Canada).
Warehouse Class. : Class II Commodity.

EMERGENCY SPILL INFORMATION : PHILIP ENTERPRISE INC. 1-800-567-7455 (CANADA)
OTHER INFORMATION : 905.458.1555

Section 2. Composition, Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits
SIO	112945-52-5 (Specific) 7631-86-9 (General)	100	Not available.

Section 3. Hazards Identification

Physical State and Appearance : Solid. (Fine powder)
Emergency Overview : CAUTION!
May be harmful if inhaled. Do not breathe dust. Dry powdered materials can build static electrical charges when subjected to friction. Proper precautions should be taken when using this material in the presence of flammable or explosive gases and liquids.
Routes of Entry : Eye contact. Skin contact. Inhalation. Ingestion.
Potential Acute Health Effects
Eyes : High concentrations may cause mechanical irritation to eyes.
Skin : May cause drying of skin. Avoid skin contact.
Inhalation : May be harmful if inhaled. May cause irritation of respiratory tract at levels above industry standards.
Ingestion : No adverse effects expected. Do not ingest.
Medical Conditions Aggravated by Overexposure: : Individuals with pre-existing respiratory conditions such as asthma or skin conditions such as dermatitis may be at greater risk from exposure to material.
Overexposure /Signs/Symptoms : Not available.

See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact : Immediately flush lightly with plenty of water for at least 15 minutes. If symptoms develop, seek medical attention.
Skin Contact : Wash skin for personal hygienic reasons. If symptoms develop, seek medical attention.
Inhalation : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop, seek medical attention.
Ingestion : Do not induce vomiting. If conscious, rinse mouth with water. If symptoms develop, seek medical attention.
Notes to Physicians : Treat symptomatically for lung or eye irritation, if present.

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Section 5. Fire Fighting Measures

Flammability of the Product	: Not applicable.
Autoignition Temperature	: Not applicable.
Flash Points	: Not applicable.
Flammable Limits	: Not applicable.
Products of Combustion	: Not applicable.
Fire Hazards in Presence of Various Substances	: Dry powdered materials can build static electrical charges when subjected to friction. Proper precautions should be taken when using this material in the presence of flammable or explosive gases and liquids.
Explosion Hazards in Presence of Various Substances	: Risks of explosion of the product in presence of mechanical impact: Not applicable. Risks of explosion of the product in presence of static discharge: Fumed silica can build up static electrical charges when subjected to friction. Fumed silica is an inorganic dust and will not create nor support conditions that would result in a dust explosion or fire.
Fire Fighting Media and Instructions	: Fire Fighting Media: Not applicable. Instructions: Not applicable. Not applicable.
Protective Clothing (Fire)	: Standard personal protective equipment for structural firefighting.
Special Remarks on Fire Hazards	: No additional remark.
Special Remarks on Explosion Hazards	: No additional remark.

Section 6. Accidental Release Measures

Small Spill and Leak	: Spills may be collected, preferably by vacuum, and placed in suitable container for disposal. Wear goggles if release creates conditions where eye contact is probable. Ventilate area if necessary. If user operations generate dust, then an approved respirator for dust/mists is recommended.
Large Spill and Leak	: No additional remark.

Section 7. Handling and Storage

Handling	: Avoid contact with skin and eyes. Avoid creating dust. Do not breathe dust. Wash exposed skin frequently. Good practices should be followed in regard to work clothing.
Storage	: Product should be stored in a cool dry location and away from volatile chemicals.

Section 8. Exposure Controls, Personal Protection

Engineering Controls : If user operations generate dust, fume, or mist, use ventilation to minimize dust levels.

Personal Protection

Eyes : Safety glasses are recommended. Goggles may be necessary at high dust concentrations.

Body : Wear appropriate clothing to minimize skin contact.

Respiratory : An approved air-purifying respirator (APR) for particulates may be appropriate to control exposure to dust. Protection provided by air-purifying respirators is limited. Use a positive-pressure, air supplied respirator if there is any potential for uncontrolled release, exposure levels are not known, or any circumstances where air-purifying respirators may not provide adequate protection. Use of respirators must include a complete respiratory protection program in accordance with national standards and current best practices.

Hands : Drying may occur. Barrier cream application prior to skin exposure may assist in the removal of silica from the skin.

Feet : Not available.

Protective Clothing (Pictograms)



Personal Protection in Case of a Large Spill : Goggles. Wear appropriate clothing to minimize skin contact. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Cab-O-Sil® M-5

ACGIH TLV (United States)
: 10 mg/m³ Form: Total dust for particles not otherwise classified.
OSHA PEL (United States)
: 10 mg/m³ Form: Nuisance dust.

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	: Solid. (Fine powder)
Color	: White.
Odor	: None.
Taste	: Not available.
Molecular Weight	: Not available.
Molecular Formula	: Not available.

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pH (1% Soln/Water)	: 4.0 (approximately 4% silica in water)
Boiling/Condensation Point	: 2230°C (4046°F) (approximate)
Melting/Freezing Point	: 1700°C (3092°F) (approximate)
Critical Temperature	: Not available.
Specific Gravity	: 2.2 g/cm ³ @ 20°C (Water = 1)
Vapor Pressure	: Not applicable.
Vapor Density	: Not applicable.
Volatility	: Not applicable.
Odor Threshold	: Not applicable.
Evaporation Rate	: Not applicable.
VOC	: Not available.
Viscosity	: Not applicable.
LogK _{ow}	: Not available.
Ionicity (in Water)	: Not applicable.
Dispersion Properties	: Not available.
Solubility	: Insoluble in water.

Section 10. Stability and Reactivity

Stability and Reactivity	: The product is stable.
Conditions of Instability	: None.
Incompatibility with Various Substances	: Not applicable.
Remarks on Reactivity/Incompatibility	: Stable.
Hazardous Decomposition Products	: None.
Hazardous Polymerization	: Will not occur.

Section 11. Toxicological Information

Toxicity Data

Ingredient Name	Test	Result	Route	Species
Cab-O-Sil® M-5	LD	>5000 mg/kg	ORAL	Rat

Special Remarks on Toxicity to Animals : No additional remark.

Chronic Effects on Humans : CARCINOGENIC EFFECTS: Not listed as a carcinogen by IARC, NTP, Z List or OSHA.
 MUTAGENIC EFFECTS: This material was negative in an Ames assay and in chromosome aberration and HGPRT mutation assays in Chinese hamster ovary (CHO) cells. This material also did not induce unscheduled DNA synthesis in rat hepatocytes.
 TERATOGENIC EFFECTS: None known.
 DEVELOPMENTAL TOXICITY: Not available.

Other Toxic Effects on Humans : No additional information.

Special Remarks on Chronic Effects on Humans : Currently reviewing the available literature and data on the chronic effects of treated and untreated silicas.
 Chronic Ingestion Effect: None known.
 Chronic Eye Effect: None known.
 Chronic Skin Effect: None known.

Special Remarks on Other Toxic Effects on Humans : No additional remark.

Section 12. Ecological Information

Ecotoxicity Data

Ingredient Name	Species	Period	Result
Not soluble in water, not mobile in soil.			

Products of Degradation : Not applicable.

Toxicity of the Products of Biodegradation : Not applicable.

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Section 13. Disposal Considerations

Waste Information : Dispose of in accordance with all applicable laws and regulations. When disposed as sold, not a hazardous waste under US RCRA regulations. Same disposal consideration should be given for empty containers; reuse is not recommended.

EPA WASTE NO : Not applicable.

Consult your local or regional authorities.

Section 14. Transport Information

Regulatory Information	UN number	Proper shipping name	Class	Packing Group	Label	Additional information
DOT Classification			Not a DOT controlled material (United States).			
TDG Classification			Not regulated under TDG (Canada).			
ADR/RID Class						
IMDG Class						
IATA-DGR Class						

Section 15. Regulatory Information

HCS Classification : Not controlled under the HCS (United States).

U.S. Federal Regulations : TSCA inventory: All components are listed on TSCA (U.S.).
 SARA 302/304/311/312 extremely hazardous substances: No products were found.
 SARA 302/304 emergency planning and notification: No products were found.
 SARA 302/304/311/312 hazardous chemicals: No products were found.
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Apply if the material is present at any one time in amounts equal to or greater than 10,000 pounds.
 SARA 313 toxic chemical notification and release reporting: No products were found.
 Clean water act (CWA) 307: No products were found.
 Clean water act (CWA) 311: No products were found.
 Clean air act (CAA) 112 accidental release prevention: No products were found.
 Clean air act (CAA) 112 regulated flammable substances: No products were found.
 Clean air act (CAA) 112 regulated toxic substances: No products were found.

State Regulations : The use of CAB-O-SIL® has been cleared by the United States Food and Drug Administration (FDA) for many food applications as both a direct food additive at levels up to 2 percent by weight and as a substance allowed in the manufacture of materials that come in direct contact with food in various producing, manufacturing, packing, preparing, transporting and holding operations.
 California prop. 65: This material does not contain any components listed under California Proposition 65.

WHMIS (Canada) : Not controlled under WHMIS (Canada).
 CEPA DSL: All components are listed on the DSL (Canada).

International Regulations
 EINECS : EINECS: All components are either listed or exempt from being listed on EINECS (European Community).
 DSCL (EEC) : Not available.
 International Lists : All components have been reported to ENC (Japan), AICS (Australia), TCCL (Korea), PICCS (Philippines).

Section 16. Other Information

Hazardous Material Information System (U.S.A.)

Health	1
Fire Hazard	0
Reactivity	0
Personal Protection	

National Fire Protection Association (U.S.A.)



References : - Manufacturer's Material Safety Data Sheet.
 - Sax's Dangerous Properties of Industrial Materials, 9th edition, CDROM Version 1.0


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