



MATERIAL SAFETY DATA SHEET

SECTION 1 - MATERIAL IDENTIFICATION AND USE		File Number : 02-A Page 1 / 2		
Material Name : SILICA FUME		Material Use: Cement – insulation		
Manufacturer's Name : Silicium Bécancour inc.		Chemical Family : Amorphous Silica		
Street Address : 6500, Yvon-Trudeau		Chemical Name : Silicon dioxide		
City : Bécancour Code postal : G9H 2V8		CAS UN Numbers : 69012-64-2		
Province: Québec Pays : Canada		Chemical Formula : SiO₂		
Emergency Telephone No. : (819) 294-6249		Trade Name and Synonyms : Silica fumes, amorphous silica		
SECTION 2 - HAZARDOUS INGREDIENTS OF MATERIAL				
Ingredients	Concentration %	Exposure limits	LD ₅₀	LC ₅₀
SiO ₂ (amorphous)	93,0-96,5%	2 mg/m ³ of respirable dust (< 5µm)	Unknown	Unknown
SECTION 3 - PHYSICAL DATA FOR MATERIAL				
Physical state gas <input type="checkbox"/> liq. <input type="checkbox"/> sol. <input checked="" type="checkbox"/>	Odour and Appearance : Inodorous, light grey	Odour Threshold : N/A	Specific Gravity : SiO₂ = 2,2 g/cm³	
Vapour Pressure : N/A	Vapour Density : N/A	Evaporation Rate : N/A	Boiling Point: N/A	
Freezing Point : N/A	Solubility in Water : Insoluble	pH : N/A	Coefficient of water / oil distribution: N/A	
SECTION 4 - FIRE AND EXPLOSION HAZARD OF MATERIAL				
Flammability Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Conditions :				
Means of Extinction : Does not burn / Not combustible				
Special Procedures : N/A				
Flashpoint and Method: N/A	Upper explosion limit : N/A		Lower explosion limit : N/A	
Auto Ignition Temperature : N/A	Rate of Burning : N/A		Hazardous Combustion Products : N/A	
Explosion Data : N/A	Explosive Power : N/A		Sensitivity to Static Discharge : N/A	
SECTION 5 - REACTIVITY DATA				
Chemical Stability Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If no, conditions :				
Incompatibility to other substances Yes <input type="checkbox"/> No <input type="checkbox"/> Hydrofluoric acid (HF) and nitric acid (HNO₃)				
Reactivity : Can must be used in presence of oxidants and acids like hydrofluoric acid				
Hazardous Decomposition Products : A reaction with hydrofluoric acid (HF) or nitric acid (HNO₃) leads to the formation of toxic gases such as silicon tetrafluoride (SiF₄) or nitrous gases (NO_x). Heating above 1000°C can results in the formation of crystalline SiO₂ – modifications as cristaballite/tridymite which may cause pulmonary fibrosis (silicosis). In the presence of water, there may be release of hydrogen.				



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SECTION 6 - TOXICOLOGICAL PROPERTIES SILICA FUME Page 2 / 2

Route of Entry: Skin Contact Skin Absorption Eye Contact Inhalation Acute Inhalation Chronic Ingestion

Effects of Acute Exposure to Product: **Skin and eyes irritation of breathing tracks (upper).**

Effects of Chronic Exposure to Product : **Pneumoconiosis possible (without pulmonary lesion). Pneumoconiosis may depend on the size of the particles.**

LD ₅₀ of Product (Specify Species and Route) : Not available	Irritancy of Product : Not available	Exposure limits of Product : Not available
LC ₅₀ of Product (Specify Species) : Not available	Sensitization to Product : Not available	Synergistic materials : Not available

Carcinogenicity Reproductive effects Teratogenicity Mutagenicity

SECTION 7 - PREVENTIVE MEASURES

Personal Protective Equipment :

Gloves : Any gloves	Respiratory : Half – mask dustproof	Eye : Safety glasses	Footwear : N/A
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Clothing : Regular working clothes	Other :
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Engineering Controls : **Natural ventilation**

Leak and Spill Procedure: **No special procedure**

Waste Disposal: **As per municipal, provincial and federal laws**

Handling Procedures and Equipment : **Use containers and method that will prevent spreading of material on the floor.**

Storage Requirements : **Store in dry and ventilated area**

Special Shipping Information : **None**

SECTION 8 - FIRST AID MEASURES

Skin: **Wash with water**

Eye : **Rinse thoroughly with water. If irritation persists, see a doctor.**

Inhalation: **Move to a ventilated area. For severe irritation see a doctor.**

Ingestion: **Not available**

General Advice :

SECTION 9 - PREPARATION DATE OF M.S.D.S.

Additional Information :

Sources Used : **Canadian standard CSA-A23,5-M86, CSST of the province of Quebec TLV ACGIH, NIOSH**

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