

SILICA FUME

SECTION 1. IDENTIFICATION

Product Identifier **SILICA FUME**
Other Means of Identification **Silica fume, amorphous silica**
Recommended Use **Cement - Insulation**
Restrictions on Use **None known**
Initial Supplier Identifier **Integrity Chemical Solutions Inc.**
 205 Crystal Shores Drive
 Okotoks, Alberta
 T1S 2L1
Emergency Telephone Number **403.988.7695**

SECTION 2. HAZARD IDENTIFICATION

Classification **Not classified**
Label Elements **n/a**
Other Hazards **n/a**

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration	Common name / Synonyms	Other identifiers
Silicon dioxide	69012-64-2	100%	Silica Fume	Amorphous silica

Notes

This product contains <0.05% of Crystalline silica.
There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.
Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST-AID MEASURES

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin Contact Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.

Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Ingestion	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Most Important Symptoms and Effects, Acute and Delayed	No known significant effects or critical hazards.
Immediate Medical Attention and Special Treatment	Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Specific treatments : No specific treatment. Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media Suitable	Use an extinguishing agent suitable for the surrounding fire.
Extinguishing Media Unsuitable	None known.
Extinguishing Media Specific Hazards Arising from the Product	No specific fire or explosion hazard.
Special Protective Equipment and Precautions for Fire-Fighters	No special measures are required. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures	For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental Precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods for Containment and Cleaning Up	Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Protective measures

Advice on general occupational hygiene

Put on appropriate personal protective equipment (see Section 8).
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Conditions for Safe Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL	
	TWA	STEL	TWA	STEL
Silicon dioxide	None	None	None	None

Notes

Appropriate Engineering Controls Environmental exposure controls Individual Protection Measures

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face Protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin Protection Hand Protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body Protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical State	Solid
Colour	Gray (Light)
Odour	None
Odour Threshold	
pH	Not available
Melting Point and Freezing Point	Not available
Initial Boiling Point and Boiling Range	Not available
Flash Point	Not applicable
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable
Upper and Lower Flammability or Explosive Limit	Not applicable
Vapour Pressure	Not applicable
Vapour Density (air = 1)	Not applicable
Relative Density (water = 1)	Not available
Solubility in Water	Not available
Solubility in Other Liquids	Not available
Partition Coefficient, n-Octanol / Water (Log Kow)	Not available
Auto-ignition Temperature	Not applicable
Decomposition Temperature	Not applicable
Viscosity	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical Stability	The product is stable.
Possibility of Hazardous Reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to Avoid Incompatible Materials	No specific data.
Hazardous Decomposition	Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis. Reactive with Hydrofluoric acid (HF) and Nitric acid (HNO ₃). Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Products

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

☐ Inhalation ☒ Skin contact ☒ Eye contact ☒ Ingestion

Acute Toxicity

LC50 There is no data available.

LD50 (oral) There is no data available.

LD50 (dermal) There is no data available.

Notes

Skin Corrosion / Irritation There is no data available.

Serious Eye Damage / Irritation There is no data available.

STOT (Specific Target Organ Toxicity) - Single Exposure There is no data available.

Aspiration Hazard There is no data available.

STOT (Specific Target Organ Toxicity) - Repeated Exposure There is no data available.

Respiratory and/or Skin Sensitization There is no data available.

Carcinogenicity

Chemical Name	IARC	ACGIH®	OSHA
Silicon dioxide	There is no data available.	There is no data available.	There is no data available.

Reproductive Toxicity

Development of Offspring No known significant effects or critical hazards.

Sexual Function and Fertility No known significant effects or critical hazards.

Effects on or via Lactation No known significant effects or critical hazards.

Germ Cell Mutagenicity No known significant effects or critical hazards.

Interactive Effects

SECTION 12. ECOLOGICAL INFORMATION *(section heading must appear; all content is optional)*

Ecotoxicity There is no data available.

Persistence and Degradability There is no data available.

Bioaccumulative Potential There is no data available.

Mobility in Soil There is no data available.
Other Adverse Effects There is no data available.

SECTION 13. DISPOSAL CONSIDERATIONS *(section heading must appear; all content is optional)*

Disposal Methods The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14. TRANSPORT INFORMATION *(section heading must appear; all content is optional)*

Regulation	UN No.	Proper Shipping Name	Technical Name (for N.O.S. entry)	Transport Hazard Class(es)	Packing Group
Not regulated.					

Special Precautions
Environmental Hazards

No.

Transport in Bulk
According to Annex II of MARPOL 73/78 and the IBC Code

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15. REGULATORY INFORMATION *(section heading must appear; all content is optional)*

Safety, Health and Environmental Regulations

TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): All components are listed or exempted.

WHMIS 2015 Classification
Not a WHMIS controlled product

SECTION 16. OTHER INFORMATION

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