


Section 1: Product & Company Information

Product Name: Salt Gel
Chemical Family: Sepiolite
Product Use: Drilling Fluid Additive

Workplace Hazardous Materials Information Systems Data (WHMIS):

	Class ID	Class	Workplace Hazard
	D-2-A	Materials Causing Other Toxic Effects - Very Toxic	Toxic effects

Manufacturer Name: HiTech Fluid Systems
Address: #1800, 505 3rd Street SW, Calgary, AB T2P 3E6 Canada
General Phone Number: (403)547-2906
General Fax Number: (403)547-3129
MSDS Revision Date: June 1, 2008
Supercedes: June 23, 2005
Prepared By: HiTech Fluid Systems
Preparer's Phone: (403)547-2906

Section 2: Composition/Information on Ingredients

Chemical Name	Concentration	CAS#
Crystalline Silica, Quartz	<1.0%	14808-60-7

Section 3: Hazards Identification

Emergency Overview: Where cristobalite or tridymite are present, use 1/2 of the PEL or TLV value for crystalline quartz.

Routes of Entry:

Skin Contact: Yes
Skin Absorption: No
Eye Contact: Yes
Inhalation: Yes
Ingestion: No

Potential Health Effects:

Skin:	Prolonged exposure may cause dermatitis.
Eye:	Exposure may cause irritation to the eyes and eyelids.
Inhalation:	Acute exposure to dust levels higher than the TLV may cause irritation, causing dry cough. Chronic exposure may lead to development of silicosis or other respiratory problems. A persistent dry cough and laboured breathing on heavy exertion are symptoms.
Ingestion:	N/A

Section 4: First Aid Measures

Eye Contact:	Flush eyes with water for at least 15 minutes. If adverse symptoms develop, seek medical attention.
Skin Contact:	Wash with soap and water. If adverse symptoms persist, seek medical attention.
Inhalation:	Move patient to fresh air. If difficulty in breathing or symptoms of irritation persist, seek medical attention.
Ingestion:	DO NOT induce vomiting. Call a physician immediately.
Other First Aid:	Where cristobalite or tridymite are present, use 1/2 of the PEL or TLV value for crystalline quartz.

Section 5: Fire Fighting Measures

Conditions Of Flammability:	Non-flammable
Extinguishing Media:	Dry chemical, CO ₂ , foam, water
Flashpoint:	N/A
Upper Flammable Limit:	N/A
Lower Flammable Limit:	N/A
Autoignition Temperature:	N/A
Protective Equipment:	Firefighters must wear appropriate breathing apparatus and clothing.
Sensitivity To Impact or Static Discharge:	Not known
Hazardous Combustion Products:	None known.
Fire Comment:	

Section 6: Accidental Release Measures

- Personnel Precautions:** Use proper personal protective equipment as listed in section 8.
- Spill Cleanup Measures:** Use appropriate safety equipment. Small spills, sweep up and put into approved DOT containers for disposal or re-use. Large spills, do not allow to enter waterways, sweep or shovel into approved DOT containers for re-use or disposal.

Section 7: Handling & Storage

- Handling:** No special procedures required.
- Storage:** Store in a cool, dry, well ventilated place. Keep container tightly closed and away from incompatible materials.

Section 8: Exposure Controls, Personal Protection, Exposure Guidelines

- Engineering Controls:** Use dustless systems for handling, storage, and clean-up, so dust does not exceed PEL limits.
- Personal Protective Equipment:** Chemical-resistant clothing is recommended, including gloves, apron, and goggles.
- Respiratory Protection:** In absence of proper ventilation, recommended NIOSH-approved dust respirator.
- Exposure Limits:** OSHA PEL: Classified as a nuisance dust when less than 1% crystalline silica is present, PEL=5.00 mg/m³. If greater than 1% crystalline silica, then exposure shall not exceed an 8 hour time weighted average limit as stated in 29 CFR 1910.1000 Table Z-1-A for air contaminants, specifically; Silica, Crystalline Quartz (respirable) 0.1 mg/m³. ACGIH TLV: Classified as a nuisance dust when less than 1% crystalline silica, TLV-TWA= 10 mg/m³ (Total dust), 5 mg/m³ (Respirable) If greater than 1% crystalline silica, the TLV-TWA = 0.1 mg/m³ (Respirable crystalline quartz)

Chemical Name	ACGIH TLV-TWA	OSHA PEL-TWA
Crystalline Silica, Quartz	0.05 mg/m ³	0.1 mg/m ³

Section 9: Physical & Chemical Properties

Physical State:	Solid
Odour And Appearance:	Light gray colour; earthy odour when wet
Odour Threshold:	Not available
Boiling Point:	>537°C
Evaporation Rate:	Not available
Melting Point:	Not available
Freezing Point:	Not available
Specific Gravity:	1.9-2.4
Solubility in Water:	Insoluble in water.
Vapour Density:	Not available
Vapour Pressure:	Not available
pH:	Not available
Flash Point:	N/A
Volatility (% by volume):	Not available
Coefficient of Water to Oil distribution:	Not available

Section 10: Stability & Reactivity

Chemical Stability:	Yes
Hazardous Polymerization:	Will not occur.
Conditions Of Chemical Instability:	
Incompatible Substances:	None known.
Special Decomposition Products:	None known.

Section 11: Toxicological Information

Chemical Name	LD ₅₀ (Oral Rat)	LD ₅₀ (Dermal Rabbit)	LC ₅₀ (Inhalation Rat)
Crystalline Silica, Quartz	Not Available	Not Available	Not Available

Effects Of Acute Exposure: Not determined

Effects Of Chronic Exposure: Repeated or prolonged exposure to respirable crystalline quartz dust may cause delayed (chronic) lung injury (silicosis). Silicosis is a form of disabling pulmonary fibrosis, which can be progressive and may lead to death.

General Irritancy Of Product: Not determined

Sensitization: Not determined

Carcinogenicity: Crystalline Silica may reasonably be anticipated to be a carcinogen.

Reproductive Toxicity: N/A

Teratogenicity: N/A

Embryotoxicity: Not Available

Mutagenicity: N/A

Synergistic Products: N/A

Section 12: Ecological Information

Ecotoxicity: Not Available

Environmental Fate: Not Available

Section 13: Disposal Considerations

Waste Disposal: All waste should be disposed of according to federal, provincial and local regulations. Containers should NOT be re-used. Containers should be disposed of in accordance with government regulations.

Section 14: Transport Information


TDG Classification: Not regulated

DOT UN Number: Not regulated

Shipping Notes: No special requirements

Section 15: Regulatory Information

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This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16: Additional Information

MSDS Revision Date: June 1, 2008

MSDS Revision Notes:

MSDS Author: HiTech Fluid Systems

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