

Section 1: Product & Company Information

Product Name: Bentone 150
Chemical Family: Organophilic Clay
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: No specific measures required.

Routes of Entry:

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

Potential Health Effects:

Skin:	Cannot be absorbed through the skin. Not expected to cause irritation.
Eye:	May produce mechanical irritation.
Inhalation:	May cause slight irritation.
Ingestion:	Not expected to produce adverse effects.

Section 4: First Aid Measures

Eye Contact:	Flush eyes with running water for at least 15 minutes. If adverse symptoms develop, seek medical attention.
Skin Contact:	Wash with soap and water.
Inhalation:	Remove patient to fresh air. If breathing is difficult, administer oxygen. Administer artificial respiration if required, and seek medical attention.
Ingestion:	Provide symptomatic treatment and seek medical attention.
Other First Aid:	No specific measures required.

Section 5: Fire Fighting Measures

Conditions Of Flammability:	Non-flammable
Extinguishing Media:	Dry chemical, CO ₂ , foam, water
Flashpoint:	Not Applicable
Upper Flammable Limit:	Not Applicable
Lower Flammable Limit:	Not Applicable
Autoignition Temperature:	Not Applicable
Protective Equipment:	Firefighters must wear appropriate breathing apparatus and clothing.
Sensitivity To Impact or Static Discharge:	Not Available
Hazardous Combustion Products:	Avoid high dust concentrations, and ensure all equipment is properly grounded to prevent static discharges.
Fire Comment:	No 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: Avoid ingestion. Practice reasonable caution and personal cleanliness. Avoid skin and eye contact.

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: Provide mechanical ventilation to prevent dust concentrations, and to reduce potential exposure.

Personal Protective Equipment: Chemical-resistant clothing is recommended, including gloves, apron, and goggles.

Respiratory Protection: Recommend NIOSH-approved dust respirator.

Exposure Limits: Nuisance dust : ACGIH TLV-8 hr TWA 10 mg/m³ total, Quartz 0.05 mg/m³. OSHA PEL- 8 hr TWA 15 mg/m³ total, 8 hr TWA 5 mg/m³ respirable, Quartz 0.1 mg/m³.

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:	Off-white powder; odourless
Odour Threshold:	Not Available
Boiling Point:	Not Available
Evaporation Rate:	Not Available
Melting Point:	Not Available
Freezing Point:	Not Available
Specific Gravity:	1.6 g/cm ³
Solubility in Water:	Insoluble
Vapour Density:	Not Available
Vapour Pressure:	Not Available
pH:	Not Available
Flash Point:	Not Applicable
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:	Possible emissions of carbon monoxide, carbon dioxide, ammonia

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:	May cause slight irritations.
Effects Of Chronic Exposure:	As with any nuisance dust, long-term exposure to concentrations above recommended guidelines may overload the lung clearance mechanism and cause adverse lung effects and shortness of breath. Long-term exposure to products containing crystalline silica may cause silicosis.
General Irritancy Of Product:	None known
Sensitization:	Not Available
Carcinogenicity:	Contains crystalline silica, a known carcinogen to humans.
Reproductive Toxicity:	Not Applicable
Teratogenicity:	Not Applicable
Embryotoxicity:	Not Available
Mutagenicity:	Not Applicable
Synergistic Products:	Not Applicable

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.
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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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