


Section 1: Product & Company Information

Product Name: Bentonite - ABI Untreated
Chemical Family: Natural Mineral, Montomorillonite
Product Use: Oilwell 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	<1-2%	14808-60-7

Section 3: Hazards Identification

Emergency Overview: N/A

Routes of Entry:

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

Potential Health Effects:

Skin:	No adverse effects expected.
Eye:	Contact may cause mechanical irritation and possible injury.
Inhalation:	Breathing silica dust may not cause noticeable injury or illness, even though permanent lung damage may be occurring. Inhalation of dust may cause irritation of the nose, throat and respiratory passages. Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling, and sometimes fatal lung disease called silicosis. Symptoms include coughing, shortness of breath, wheezing, non-specific chest illness, and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with silicosis are predisposed to develop tuberculosis.
Ingestion:	No adverse effects expected for normal, incidental ingestion.

Section 4: First Aid Measures

Eye Contact:	Flush eyes immediately with large amounts of water, lifting the upper and lower lids occasionally. If irritation persists, or for imbedded foreign body, get immediate medical attention.
Skin Contact:	No first-aid should be needed, as this product does not affect the skin. Wash exposed skin with soap and water before coffee breaks and at the end of the shift.
Inhalation:	Remove patient to fresh air. If breathing has stopped, perform artificial respiration. If breathing is difficult, have qualified personnel administer oxygen. Seek prompt medical attention.
Ingestion:	If large amounts are ingested, seek immediate medical attention.
Other First Aid:	N/A

Section 5: Fire Fighting Measures

Conditions Of Flammability:	N/A
Extinguishing Media:	This product is not considered flammable, nor will it support combustion. Use extinguishing media appropriate to the surrounding fire.
Flashpoint:	N/A
Upper Flammable Limit:	N/A
Lower Flammable Limit:	N/A
Autoignition Temperature:	N/A
Protective Equipment:	N/A
Sensitivity To Impact or Static Discharge:	N/A
Hazardous Combustion Products:	N/A

Fire Comment:

Section 6: Accidental Release Measures

Personnel Precautions: Use proper personal protective equipment as listed in section 8.

Spill Cleanup Measures: Vacuum if possible, to avoid generating airborne dust. Avoid breathing dust. Wear an approved respirator. Avoid adding water; product will become slippery when wet.

Section 7: Handling & Storage

Handling: Do not breathe dust. Use normal precautions against bag breakage or spills of bulk material. Avoid creation of respirable dust. Use adequate ventilation and dust collection. Maintain and use proper, clean respiratory equipment. Launder clothing that has become dusty. Empty bags retain silica residue and must be handled in accordance with provisions of this MSDS.

Storage: Use good housekeeping in storage and use areas to prevent accumulation of dust in work areas.

Section 8: Exposure Controls, Personal Protection, Exposure Guidelines

Engineering Controls: Use local exhaust as required to maintain exposures below applicable occupational exposure limits.

Personal Protective Equipment: Protective gloves are recommended. Safety glasses or goggles are recommended. Protective clothing appropriate for work environment. Dusty clothing should be laundered before re-use.

Respiratory Protection: Use appropriate protection for respirable particulate, based on consideration of airborne workplace concentration and duration of exposure arising from intended end use.

Exposure Limits: Respirable Quartz 0.1 mg/m³ Respirable Dust 5 mg/m³ Total Dust 15 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:	Tan/beige to light gray powder; odourless
Odour Threshold:	N/A
Boiling Point:	N/A
Evaporation Rate:	N/A
Melting Point:	N/A
Freezing Point:	N/A
Specific Gravity:	2.5
Solubility in Water:	Negligible
Vapour Density:	N/A
Vapour Pressure:	N/A
pH:	8 - 10 (5% Aqueous Suspension)
Flash Point:	N/A
Volatility (% by volume):	N/A
Coefficient of Water to Oil distribution:	N/A

Section 10: Stability & Reactivity

Chemical Stability:	No
Hazardous Polymerization:	Will not occur.
Conditions Of Chemical Instability:	N/A
Incompatible Substances:	N/A
Special Decomposition Products:	N/A

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 delayed respiratory disease, if dust inhaled over a prolonged period of time.

Effects Of Chronic Exposure: May cause delayed respiratory disease, if dust inhaled over a prolonged period of time.

General Irritancy Of Product: N/A

Sensitization: N/A

Carcinogenicity: N/A

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: Follow regulations for solid waste.

Section 14: Transport Information


TDG Classification: N/A

DOT UN Number: N/A

Shipping Notes: N/A

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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