

Section 1: Product & Company Information

Product Name: Millzan
Chemical Family: Xanthan Gum Biopolymer
Product Use: Drilling Mud Additive

Workplace Hazardous Materials Information Systems Data (WHMIS):

Class ID	Class	Workplace Hazard
	None	Not a Controlled Product

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#
No Hazardous Ingredients		

Section 3: Hazards Identification

Emergency Overview: Seek medical attention if symptoms develop or persist.

Routes of Entry:

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

Potential Health Effects:

Skin:	Prolonged contact with the dry powder may cause drying of the skin.
Eye:	Not expected to cause prolonged or significant eye irritation. Material is dusty and may scratch the surface of the eye.
Inhalation:	Excessive inhalation may cause respiratory discomfort.
Ingestion:	Non-toxic through ingestion and dermal absorption.

Section 4: First Aid Measures

Eye Contact:	Flush with plenty of water. If irritation develops, seek medical attention.
Skin Contact:	No harmful effects expected.
Inhalation:	If large quantities have been inhaled, keep airways open as necessary.
Ingestion:	Symptomatic treatment. No harmful effects are expected.
Other First Aid:	Seek medical attention if symptoms develop or persist.

Section 5: Fire Fighting Measures

Conditions Of Flammability:	N/A
Extinguishing Media:	Foam, dry chemical, carbon dioxide
Flashpoint:	N/A
Upper Flammable Limit:	N/A
Lower Flammable Limit:	N/A
Autoignition Temperature:	N/A
Protective Equipment:	For fires involving this material, do not enter area without proper protective equipment, including self-contained breathing apparatus. In common with most organic powders, this product should be treated as a combustible dust in the finely divided and suspended state.
Sensitivity To Impact or Static Discharge:	N/A
Hazardous Combustion Products:	May include carbon monoxide (CO) and carbon dioxide (CO ₂).
Fire Comment:	As with most organic powders, flammable dust clouds may be formed in air. Avoid creating dust and sources of ignition.

Section 6: Accidental Release Measures

- Personnel Precautions:** Use proper personal protective equipment as listed in section 8.
- Spill Cleanup Measures:** Sweep up spilled material and repackage. Hose spilled area thoroughly with water. Use caution as the product is extremely slippery when wet.

Section 7: Handling & Storage

- Handling:** Use caution to avoid creation of dust and to prevent inhalation. Avoid contact with product dust. Airborne dust concentrations above 20mg/L may create a dust explosion hazard. Keep container closed. Use only with adequate ventilation. Avoid contact with eyes, skin, and clothing. Discard or thoroughly clean contaminated clothing and shoes before re-use.
- Storage:** Keep container closed when not in use. Store in a cool dry area.

Section 8: Exposure Controls, Personal Protection, Exposure Guidelines

- Engineering Controls:** Local exhaust
- Personal Protective Equipment:** Skin and eye protection not normally required. User discretion and preference.
- Respiratory Protection:** In heavy product dust exposure, an approved mask is recommended.
- Exposure Limits:** N/A

Chemical Name	ACGIH TLV-TWA	OSHA PEL-TWA
No Hazardous Ingredients		

Section 9: Physical & Chemical Properties

- Physical State:** Solid
- Odour And Appearance:** White to tan powder; slight odour
- Odour Threshold:** Low
- Boiling Point:** N/A
- Evaporation Rate:** N/A
- Melting Point:** N/A
- Freezing Point:** N/A
- Specific Gravity:** 1.4 - 1.6
- Solubility in Water:** Complete
- Vapour Density:** N/A
- Vapour Pressure:** N/A

pH:	7.0 @ 1.0%
Flash Point:	N/A
Volatility (% by volume):	N/A
Coefficient of Water to Oil distribution:	N/A

Section 10: Stability & Reactivity

Chemical Stability:	Yes
Hazardous Polymerization:	Will not occur.
Conditions Of Chemical Instability:	
Incompatible Substances:	Strong oxidants
Special Decomposition Products:	Thermal decomposition products may include CO and CO ₂ .

Section 11: Toxicological Information

Chemical Name	LD ₅₀ (Oral Rat)	LD ₅₀ (Dermal Rabbit)	LC ₅₀ (Inhalation Rat)
No Hazardous Ingredients			

Effects Of Acute Exposure:	N/A
Effects Of Chronic Exposure:	N/A
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: Dispose of in accordance with all laws and regulations.

Section 14: Transport Information

TDG Classification: N/A

DOT UN Number: N/A

Shipping Notes: N/A

Section 15: Regulatory Information

Workplace Hazardous Materials Information Systems Data (WHMIS):

	Class ID	Class	Workplace Hazard
	None	Not a Controlled Product	

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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