


## Section 1: Product & Company Information

**Product Name:** Flowzan  
**Chemical Family:** Biopolymer  
**Product Use:** Rheology control in drilling fluids

### 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:** No specific measures

### Routes of Entry:

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

**Potential Health Effects:**

<b>Skin:</b>	Prolonged exposure may cause irritation.
<b>Eye:</b>	May cause slight irritation and/or redness.
<b>Inhalation:</b>	May cause some respiratory irritation.
<b>Ingestion:</b>	Non-toxic through ingestion

**Section 4: First Aid Measures**

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<b>Eye Contact:</b>	Flush eyes with running water for at least 15 minutes. Seek medical attention.
<b>Skin Contact:</b>	Wash with soap and water. If adverse symptoms develop, seek medical attention.
<b>Inhalation:</b>	Move patient to fresh air. Symptomatic treatment.
<b>Ingestion:</b>	If conscious, give 2 to 4 glasses of water to drink. DO NOT induce vomiting. Seek medical attention. Do not give anything by mouth to an unconscious or convulsing person.
<b>Other First Aid:</b>	No specific measures

**Section 5: Fire Fighting Measures**

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<b>Conditions Of Flammability:</b>	Not flammable unless preheated
<b>Extinguishing Media:</b>	Dry chemical, carbon dioxide, foam, water
<b>Flashpoint:</b>	Not Applicable
<b>Upper Flammable Limit:</b>	Not Applicable
<b>Lower Flammable Limit:</b>	Not Applicable
<b>Autoignition Temperature:</b>	Not Applicable
<b>Protective Equipment:</b>	Firefighters must wear appropriate breathing apparatus and clothing.
<b>Sensitivity To Impact or Static Discharge:</b>	If in a finely divided and suspended state, treat as a flammable dust.
<b>Hazardous Combustion Products:</b>	Combustible dust
<b>Fire Comment:</b>	

## Section 6: Accidental Release Measures

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- 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

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- 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

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- 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:** Not Applicable

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

## Section 9: Physical & Chemical Properties

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- Physical State:** Solid
- Odour And Appearance:** White powder, slight odour
- Odour Threshold:** Slight
- Boiling Point:** Not Applicable
- Evaporation Rate:** Not Applicable
- Melting Point:** Not Applicable
- Freezing Point:** Not Applicable
- Specific Gravity:** 1.4-1.6
- Solubility in Water:** Complete

<b>Vapour Density:</b>	Not Applicable
<b>Vapour Pressure:</b>	Not Applicable
<b>pH:</b>	Not Available
<b>Flash Point:</b>	Not Applicable
<b>Volatility (% by volume):</b>	Not Applicable
<b>Coefficient of Water to Oil distribution:</b>	Not Applicable

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## Section 10: Stability & Reactivity

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<b>Chemical Stability:</b>	Yes
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Conditions Of Chemical Instability:</b>	
<b>Incompatible Substances:</b>	Not Determined
<b>Special Decomposition Products:</b>	Not Determined

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## Section 11: Toxicological Information

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Chemical Name	LD <sub>50</sub> (Oral Rat)	LD <sub>50</sub> (Dermal Rabbit)	LC <sub>50</sub> (Inhalation Rat)
No Hazardous Ingredients			

<b>Effects Of Acute Exposure:</b>	Not Applicable
<b>Effects Of Chronic Exposure:</b>	Not Applicable
<b>General Irritancy Of Product:</b>	None Known
<b>Sensitization:</b>	Not Applicable
<b>Carcinogenicity:</b>	Not Applicable
<b>Reproductive Toxicity:</b>	Not Applicable
<b>Teratogenicity:</b>	Not Applicable
<b>Embryotoxicity:</b>	Not Available
<b>Mutagenicity:</b>	Not Applicable
<b>Synergistic Products:</b>	Not Applicable

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## Section 12: Ecological Information

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<b>Ecotoxicity:</b>	Not Available
<b>Environmental Fate:</b>	Not Available

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## Section 13: Disposal Considerations

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**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

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**TDG Classification:** Not regulated  
**DOT UN Number:** Not Regulated  
**Shipping Notes:** No special requirements

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## Section 15: Regulatory Information

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### 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.

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## Section 16: Additional Information

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**MSDS Revision Date:** June 1, 2008  
**MSDS Revision Notes:**  
**MSDS Author:** HiTech Fluid Systems

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