

Section 1: Product & Company Information

Product Name: Calcium Nitrate / Envirofloc
Chemical Family: Double salt of calcium nitrate and ammonium nitrate
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: None known.

Routes of Entry:

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

Potential Health Effects:

Skin:	May cause irritation, particularly if skin is wet.
Eye:	May cause slight irritation and/or redness.
Inhalation:	May cause some respiratory irritation.
Ingestion:	Minimal toxicity

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 develop, seek medical attention.
Inhalation:	Remove patient to fresh air. If breathing has stopped, administer artificial respiration, and seek medical attention.
Ingestion:	Delay absorption of nitrate by giving milk or activated charcoal. Seek immediate medical attention.
Other First Aid:	None known.

Section 5: Fire Fighting Measures

Conditions Of Flammability:	Low fire risk. Decomposition produces oxides of nitrogen.
Extinguishing Media:	Flood with water.
Flashpoint:	Not Available
Upper Flammable Limit:	Not Available
Lower Flammable Limit:	Not Available
Autoignition Temperature:	Not Available
Protective Equipment:	Firefighters must wear appropriate breathing apparatus and clothing.
Sensitivity To Impact or Static Discharge:	None 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:	Vacuum or sweep, if dry. If wet, absorb with sand or dirt, re-use if possible. Flush area with water.

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: None required for normal use.

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

Respiratory Protection: Respiratory protection is not normally required. If use creates dust formations, then NIOSH-approved respirator with dust cartridge is recommended.

Exposure Limits: Not Available

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

Section 9: Physical & Chemical Properties

Physical State: Solid

Odour And Appearance: White crystals; odourless

Odour Threshold: Not Available

Boiling Point: Decomposes

Evaporation Rate: Not Available

Melting Point: 110°C

Freezing Point: Not Applicable

Specific Gravity: 1.06

Solubility in Water: 75% (w/w @ 25C)

Vapour Density: Not Available

Vapour Pressure: Not Available

pH: 6 (in 5% solution)

Flash Point: Not Available

Volatility (% by volume): Not Applicable

Coefficient of Water to Oil distribution: Not Available

Section 10: Stability & Reactivity

Chemical Stability:	Yes
Hazardous Polymerization:	Will not occur.
Conditions Of Chemical Instability:	Not Applicable
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)
No Hazardous Ingredients			

Effects Of Acute Exposure:	Not Available
Effects Of Chronic Exposure:	None known.
General Irritancy Of Product:	Not Available
Sensitization:	Not Applicable
Carcinogenicity:	Not Applicable
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 Applicable
Shipping Notes: No special requirements

Section 15: Regulatory Information

Workplace Hazardous Materials Information Systems Data (WHMIS):

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	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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