

Section 1: Product & Company Information

Product Name: Calcium Chloride High Test
Chemical Family: Inorganic Salt
Product Use: Drilling Mud Additive

Workplace Hazardous Materials Information Systems Data (WHMIS):

	Class ID	Class	Workplace Hazard
	D-2-B	Materials Causing Other Toxic Effects - Toxic	Skin and eye irritant

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#
Calcium Chloride	94-96%	10043-52-4

Section 3: Hazards Identification

Emergency Overview: Note to Physician: If burn is present, treat as any thermal burn, after decontamination.

Routes of Entry:

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

Potential Health Effects:

Skin:	Prolonged exposure may cause skin irritation or burns, especially if skin is moist. When dissolving, the heat produced may cause more intense effects, as well as thermal burns
Eye:	May cause severe irritation with corneal injury, which may be slow to heal.
Inhalation:	Dust may cause irritation to upper respiratory tract.
Ingestion:	Large ingestions may cause gastrointestinal irritation or ulcerations.

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:	Give large amounts of water or milk to drink, if conscious. Seek medical attention if symptoms persist.
Other First Aid:	Note to Physician: If burn is present, treat as any thermal burn, after decontamination.

Section 5: Fire Fighting Measures

Conditions Of Flammability:	None known
Extinguishing Media:	Does not burn or support combustion.
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. Combustion produces toxic fumes.
Sensitivity To Impact or Static Discharge:	Not Applicable
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:** 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. Flush residue with large amounts of water.

Section 7: Handling & Storage

- Handling:** Heat developed during diluting or dissolving is very high. Use cool water when diluting or dissolving (temperature less than 27°C/80°F)
- Storage:** Store in a cool, dry, well ventilated place. Keep container tightly closed and away from incompatible materials. Prolonged storage may cause product to cake and become wet from atmospheric moisture.

Section 8: Exposure Controls, Personal Protection, Exposure Guidelines

- Engineering Controls:** Provide general and/or local exhaust ventilation to control airborne levels below exposure guidelines.
- Personal Protective Equipment:** Chemical-resistant clothing is recommended, including gloves, apron, and goggles.
- Respiratory Protection:** In absence of proper ventilation, recommended NIOSH-approved dust respirator.
- Exposure Limits:** Nuisance dust = 10 mg/m³

Chemical Name	ACGIH TLV-TWA	OSHA PEL-TWA
Calcium Chloride	Not Available	Not Available

Section 9: Physical & Chemical Properties

- Physical State:** Solid
- Odour And Appearance:** White - off-white; odourless
- Odour Threshold:** Not Available
- Boiling Point:** 815°C
- Evaporation Rate:** Not Available
- Melting Point:** 772°C
- Freezing Point:** Not Available
- Specific Gravity:** 2.2

Solubility in Water:	Very soluble
Vapour Density:	Not Available
Vapour Pressure:	0.005 mm Hg at 20°C
pH:	Not Available
Flash Point:	Not Available
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:	Not Applicable
Incompatible Substances:	Corrosive to some metals. Avoid contact with metals such as: brass, mild steel, aluminum, or ferrous metals. Flammable hydrogen may be generated from contact with metals such as zinc. Avoid contact with sulfuric acid. Heat is generated when mixed with water. Spattering or boiling can occur.
Special Decomposition Products:	Combustion produces toxic fumes.

Section 11: Toxicological Information

Chemical Name	LD ₅₀ (Oral Rat)	LD ₅₀ (Dermal Rabbit)	LC ₅₀ (Inhalation Rat)
Calcium Chloride	1000 mg/kg	Not Available	Not Available

Effects Of Acute Exposure:	None known
Effects Of Chronic Exposure:	None known
General Irritancy Of Product:	Slight
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.

Section 14: Transport Information


TDG Classification: Not regulated

DOT UN Number: Not Applicable

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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