




Section 1: Product & Company Information

Product Name: 822 Base Oil
Chemical Family: Petroleum Hydrocarbon
Product Use: Drilling Fluid

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
	D-1-B	Materials Causing Immediate/Serious Toxic Effects - Toxic	Immediate serious toxic effects
	B-3	Combustible Liquid	Combustible Liquid

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
Supersedes: June 23, 2005
Prepared By: HiTech Fluid Systems
Preparer's Phone: (403)547-2906

Section 2: Composition/Information on Ingredients

Chemical Name	Concentration	CAS#
Petroleum Hydrocarbons, complex mixture	100%	64741-44-2 / 64741-43-1

Section 3: Hazards Identification

Emergency Overview: NOTE TO PHYSICIAN: Gastric lavage should only be done after endotracheal intubation, in view of the risk of aspiration, which can cause serious chemical pneumonitis, for which antibiotic and corticosteroid therapy may be indicated.

Routes of Entry:

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

Potential Health Effects:

Skin:	Repeated or prolonged contact may result in defatting, oil acne, redness, itching, inflammation, cracking, and possible secondary infection. Contact with heated material may cause thermal burns.
Eye:	Exposure to vapours, fumes, or mists may cause irritation. Contact with heated material may cause thermal burns. Rabbit Draize = 1.0/110@24 hours (unwashed)
Inhalation:	May cause respiratory tract irritation. May cause harmful central nervous system effects. Effects may include excitation, euphoria, headaches, dizziness, drowsiness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death. Severe exposures may cause cardiac sensitization and irregular heart rhythm. Exposure to high concentrations of dense oil may lead to oil pneumonia.
Ingestion:	May cause gastrointestinal disturbances. Symptoms may include irritation, nausea, vomiting, and diarrhea. Aspiration into the lungs may cause pneumonitis. Exposure may cause central nervous system symptoms, including CNS depression (narcosis), similar to those listed under 'Inhalation'.

Section 4: First Aid Measures

Eye Contact:	Flush eyes with water for at least 15 minutes. If adverse symptoms develop, seek medical attention. Physician assessment is mandatory.
Skin Contact:	Wash with soap and water. If irritation develops or persists, seek medical attention. Contaminated clothing should be laundered before re-use. Discard leather articles.
Inhalation:	Remove patient to fresh air. If breathing has stopped, administer artificial respiration, and seek medical attention. If resuscitation is required, physician assessment is mandatory.
Ingestion:	DO NOT induce vomiting. If patient is conscious, give them 250mL of milk or water to drink. If vomiting occurs naturally, lean patient forward to prevent aspiration. Liquid paraffin may slow gastric absorption. Seek medical attention. Do not give anything by mouth to an unconscious person.
Other First Aid:	NOTE TO PHYSICIAN: Gastric lavage should only be done after endotracheal intubation, in view of the risk of aspiration, which can cause serious chemical pneumonitis, for which antibiotic and corticosteroid therapy may be indicated.

Section 5: Fire Fighting Measures

Conditions Of Flammability:	Treat as a fire hazard.
Extinguishing Media:	Dry chemical, CO ₂ , foam, waterspray
Flashpoint:	94°C (minimum)
Upper Flammable Limit:	6.0%
Lower Flammable Limit:	0.7%
Autoignition Temperature:	>225°C
Protective Equipment:	Firefighters must wear appropriate breathing apparatus and clothing. Cover with extinguishing agent. Use waterspray to cool fire-exposed containers, and as a protective screen. Do not point solid waterstream directly into burning oil, in order to prevent spreading.
Sensitivity To Impact or Static Discharge:	None known.
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:	Use appropriate safety equipment. For small spills, sweep up and put into appropriate DOT containers for disposal or re-use. For large spills, do not allow material to enter waterways. Sweep or shovel material into DOT containers for re-use or disposal.

Section 7: Handling & Storage

Handling:	Avoid ingestion and skin and eye contact. Practice reasonable caution and personal cleanliness. Do not cut, drill, or weld empty containers.
Storage:	Store in a cool, dry, well ventilated place. Keep containers tightly closed and away from incompatible materials.

Section 8: Exposure Controls, Personal Protection, Exposure Guidelines

Engineering Controls: Use explosion-proof mechanical ventilation suitable for Group D atmospheres.

Personal Protective Equipment: Chemical-resistant clothing is recommended, including gloves, apron, and goggles. DO NOT use natural rubber or PVC.

Respiratory Protection: Up to 5mg/m³, none required. From 5 to 50mg/m³, use an approved organic vapour respirator suitable for oil mist, in areas with sufficient oxygen. Above 50mg/m³, use a full-face air-supplied or self-contained breathing apparatus.

Exposure Limits: TWA (8h) 5 mg/m³ (oil mist)

Chemical Name	ACGIH TLV-TWA	OSHA PEL-TWA
Petroleum Hydrocarbons, complex mixture		5 mg/m ³ (oil mist)

Section 9: Physical & Chemical Properties

Physical State:	Liquid
Odour And Appearance:	Clear, colourless, oily liquid; hydrocarbon odour
Odour Threshold:	Not determined.
Boiling Point:	204-371°C (approx.)
Evaporation Rate:	N/A
Melting Point:	N/A
Freezing Point:	N/A
Specific Gravity:	
Solubility in Water:	
Vapour Density:	N/A
Vapour Pressure:	<1 kPa
pH:	N/A
Flash Point:	94°C (minimum)
Volatility (% by volume):	25% in 10 hr. (approx.)
Coefficient of Water to Oil distribution:	N/A

Section 10: Stability & Reactivity

Chemical Stability:	Yes
Hazardous Polymerization:	Will not occur.
Conditions Of Chemical Instability:	Not determined.
Incompatible Substances:	Strong oxidizing agents (strong acids, peroxides, chlorine, etc.)
Special Decomposition Products:	CO _x , SO _x , smoke on combustion

Section 11: Toxicological Information

Chemical Name	LD ₅₀ (Oral Rat)	LD ₅₀ (Dermal Rabbit)	LC ₅₀ (Inhalation Rat)
Petroleum Hydrocarbons, complex mixture	>5 gm/kg	>2 gm / kg	1.72 mg/L

Effects Of Acute Exposure:	Not determined.
Effects Of Chronic Exposure:	Not determined.
General Irritancy Of Product:	Not determined.
Sensitization:	Not determined.
Carcinogenicity:	Not determined.
Reproductive Toxicity:	Not determined.
Teratogenicity:	Not determined.
Embryotoxicity:	Not Available
Mutagenicity:	Not determined.
Synergistic Products:	Not determined.

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 regulated.
Shipping Notes:	Electrically ground/bond during the pumping or transfer, to avoid static accumulation.

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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