






Section 1: Product & Company Information

Product Name: 822 Invert
Chemical Family: Petroleum Distillate
Product Use: Drilling Fluid

Workplace Hazardous Materials Information Systems Data (WHMIS):

	Class ID	Class	Workplace Hazard
	B-3	Combustible Liquid	Combustible Liquid
	D-1-B	Materials Causing Immediate/Serious Toxic Effects - Toxic	Immediate serious toxic effects
	D-2-B	Materials Causing Other Toxic Effects - Toxic	Skin and eye irritant
	E	Corrosive Materials	Corrosive

Manufacturer Name: Bri-Chem Supply Ltd.
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MSDS Revision Date: March 24, 2010
Supercedes: January 1, 2008
Prepared By: Bri-Chem Supply Ltd.
Preparer's Phone: (780) 455-8667

Section 2: Composition/Information on Ingredients

Chemical Name	Concentration	CAS#
Petroleum Hydrocarbons	< .5	64741-44-2
Calcium Hydroxide	1-5	1305-62-0
Calcium Chloride		10043-52-4
Heavy Aromatic Naptha	< .5	64742-94-5
Petroleum Distillate	60-100	64741-44-2

Section 3: Hazards Identification

Emergency Overview: Provide general supportive measures (comfort, warmth, rest). Consult a physician for all exposures, except minor instances of inhalation or contact. 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.

Routes of Entry:

Skin Contact: Yes

Skin Absorption: Yes

Eye Contact: Yes

Inhalation: Yes

Ingestion: Yes

Potential Health Effects:

Skin: Moderately irritating. 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: Slight irritating. Corrosive; may cause redness and pain, discomfort, and blurring.
Rabbit Draize = 3.7/110 @ 1 hours

Inhalation: Moderately toxic. May be irritating to respiratory tract. High vapour concentrations can displace oxygen and cause central nervous system depression, visual disturbances, nausea, vomiting, systematic poisoning, and death.

Ingestion: May be harmful if liquid is ingested or aspirated. May cause irritation and burning of mouth and throat, abdominal pain, central nervous system depression, visual disturbances, nausea, and vomiting.

Section 4: First Aid Measures

Eye Contact: Immediately flush the contaminated eye(s) with warm water for at least 15 minutes. If irritation persists, obtain medical attention.

Skin Contact: Flush contaminated area with warm water for at least 15 minutes. Under running water, remove contaminated clothing, shoes, and leather goods. If irritation persists, obtain medical attention.

Inhalation: Remove patient to fresh air. If breathing has stopped, administer artificial respiration, and seek immediate medical attention.

Ingestion: Never give anything by mouth if victim is unconscious or convulsing. Rinse mouth thoroughly with water. DO NOT induce vomiting. Have patient drink 300 ml of milk to dilute material. Seek immediate medical attention.

Other First Aid: Provide general supportive measures (comfort, warmth, rest). Consult a physician for all exposures, except minor instances of inhalation or contact. 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.

Section 5: Fire Fighting Measures

Conditions Of Flammability: At elevated temperatures

Extinguishing Media: Water spray or fog, CO₂, dry chemical, foam, halon

Flashpoint: 94°C (minimum) TCC

Upper Flammable Limit: 6.0 (% by volume)

Lower Flammable Limit: 0.7 (% by volume)

Autoignition Temperature: >225°C

Protective Equipment: Firefighters should wear appropriate breathing apparatus.

Sensitivity To Impact or Static Discharge: None known. Ensure proper grounding.

Hazardous Combustion Products: CO_x, NO_x, SO_x

Fire Comment:

Section 6: Accidental Release Measures

Personnel Precautions: Use proper personal protective equipment as listed in section 8.

Spill Cleanup Measures: Provide adequate ventilation, protective clothing, and respirators. Remove sources of heat and flame. Absorb liquid on dry clay, sand sawdust, or other absorbent material. DO NOT flush to sewer.

Section 7: Handling & Storage

Handling: Use minimal quantities in designated areas with adequate ventilation and away from sources of heat or sparks. Containers should be covered when not in use. Empty containers can present an explosion or fire hazard even when empty. DO NOT cut, puncture or weld on or near containers.

Storage: Store in tightly closed containers in a cool area away from immediate work areas and incompatible materials. No sources of heat, flames, or sparks should be present in the storage area.

Section 8: Exposure Controls, Personal Protection, Exposure Guidelines

Engineering Controls: General ventilation is normally adequate for small scale use at room temperature or below. Local exhaust ventilation is normally needed with large-scale use or at elevated temperatures.

Personal Protective Equipment: Chemical goggles or facemask, gloves, coveralls, boots as needed to prevent skin exposure. DO NOT use natural rubber or PVC.

Respiratory Protection: Up to 5 mg/m³ (oil mist) none required, from 5-50 mg/m³, use an approved organic vapour respirator suitable for oil mist. Above 50mg/m³, use full face air supplied or self-contained breathing apparatus.

Exposure Limits: ACGIH TLV = 400 ppm (TWA)

Chemical Name	ACGIH TLV-TWA	OSHA PEL-TWA
Petroleum Hydrocarbons	Not Available	Not Available
Calcium Hydroxide	5 (TWA) 8/40h	5 (TWA) 8/40h
Calcium Chloride	Not Available	Not Available
Heavy Aromatic Naptha	Not Determined	Not Determined
Petroleum Distillate	N/A	N/A

Section 9: Physical & Chemical Properties

Physical State: Liquid

Odour And Appearance: Lt - dk brown opaque liquid; hydrocarbon odour

Odour Threshold: Hydrocarbon odour

Boiling Point: 180-320°C

Evaporation Rate: Not Available

Melting Point: Not Applicable

Freezing Point: Not Available

Specific Gravity: 0.97-1.20

Solubility in Water: Insoluble in water

Vapour Density: 4 (air =1)

Vapour Pressure: 30mm @38°C

pH: 11.4

Flash Point: 94°C (minimum) TCC

Volatility (% by volume): At 20°C 25% in 10 hours. (approx.)

Coefficient of Water to Oil distribution: Insoluble in water

Section 10: Stability & Reactivity

Chemical Stability:	Yes
Hazardous Polymerization:	Will not occur.
Conditions Of Chemical Instability:	None known
Incompatible Substances:	Oxidizing substances
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	>5 mg/kg	Not Determined	Not Determined
Calcium Hydroxide	Not Available	Not Available	Not Available
Calcium Chloride	1000 mg/kg	Not Available	Not Available
Heavy Aromatic Naptha	3000 mg/kg	3000 mg/kg	Not Determined
Petroleum Distillate	5000 mg/kg	2000 mg/kg	1700 mg/m ³ per 4 h

Effects Of Acute Exposure:	Exposure to high concentrations of oil mist may lead to oil pneumonia. Severe exposure may cause cardiac sensitization and irregular heart rhythm.
Effects Of Chronic Exposure:	May cause depression, dizziness, numbness, tremors, impaired memory, headaches, and nausea.
General Irritancy Of Product:	Liquid and vapour may cause irritation of the skin, eyes, nose, throat, and respiratory system.
Sensitization:	None known
Carcinogenicity:	None known
Reproductive Toxicity:	None known
Teratogenicity:	Not Available
Embryotoxicity:	Not Available
Mutagenicity:	None known
Synergistic Products:	Not Available

Section 12: Ecological Information

Ecotoxicity:	Not Available
Environmental Fate:	Not Available

Section 13: Disposal Considerations

Waste Disposal: Combustible wastes may be burned in an approved incineration facility. Consult local authorities before disposal.

Section 14: Transport Information





TDG Classification: Not Regulated

DOT UN Number: Not Regulated

Shipping Notes:

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: March 24, 2010

MSDS Revision Notes:

MSDS Author: Bri-Chem Supply Ltd.

Disclaimer: This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as a guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.