




Section 1: Product & Company Information

Product Name: Cutter Stock D Invert
Chemical Family: Petroleum Hydrocarbon
Product Use: Drilling Fluid

Workplace Hazardous Materials Information Systems Data (WHMIS):

	Class ID	Class	Workplace Hazard
	D-2-A	Materials Causing Other Toxic Effects - Very Toxic	Toxic effects
	D-2-B	Materials Causing Other Toxic Effects - Toxic	Skin and eye irritant
	E	Corrosive Materials	Corrosive

Manufacturer Name: HiTech Fluid Systems
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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:

Routes of Entry:

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

Potential Health Effects:

Skin:	Prolonged skin contact can cause defatting of the skin, resulting in dry, cracked skin and dermatitis.
Eye:	Eye contact with product or product vapours may result in eye irritation.
Inhalation:	Inhalation of product may cause headache, dizziness, loss of appetite, and loss of consciousness. Product vapours are irritating to the respiratory tract.
Ingestion:	Pulmonary aspiration hazard if swallowed and vomiting occurs.

Section 4: First Aid Measures

Eye Contact:	Flush eyes for at least 15 minutes with clean water. Patch lightly, allowing drainage. Seek medical attention.
Skin Contact:	Remove contaminated clothing. Wash skin thoroughly with soap and water. Seek medical attention if irritation develops.
Inhalation:	Protect rescuer. Move exposed person to fresh air. If breathing has stopped, administer artificial respiration. Seek medical attention.
Ingestion:	If swallowed, do NOT induce vomiting or administer liquids to drink. Seek immediate medical attention.

Other First Aid:

Section 5: Fire Fighting Measures

Conditions Of Flammability:

Extinguishing Media:	Use dry chemical, CO ₂ , or foam. Water may not be an effective medium to extinguish fire. Cool containers with water jet in order to prevent pressure build-up, autoignition, or explosion.
Flashpoint:	141°C/285.8°F
Upper Flammable Limit:	Not available
Lower Flammable Limit:	Not available
Autoignition Temperature:	Not available

Protective Equipment:	Use supplied air or self-contained breathing apparatus (SCBA) for large fires, or for fires in enclosed areas.
Sensitivity To Impact or Static Discharge:	
Hazardous Combustion Products:	Material is sensitive to static discharge. Material is not sensitive to mechanical impact.
Fire Comment:	Released vapours may form flammable/explosive mixtures at or above the flashpoint. Vapours may travel considerable distances to ignition sources and cause a flash fire. All containers and pumping equipment must be grounded.

Section 6: Accidental Release Measures

Personnel Precautions:	Use proper personal protective equipment as listed in section 8.
Spill Cleanup Measures:	Evacuate unnecessary personnel. Eliminate all ignition sources. Stop leak if possible without risk. Contain spill and absorb with inert absorbent. Large spills should be removed with explosion-proof vacuum equipment. Large pools may be covered with foam to prevent vapour evolution. Comply with federal, provincial, and local requirements for spill notification.

Section 7: Handling & Storage

Handling:	
Storage:	Keep away from all ignition sources. Maintain temperature below the flashpoint. Head spaces in storage containers may contain hydrocarbon vapours and toxic H ₂ S gas. All containers and pumping equipment must be grounded.

Section 8: Exposure Controls, Personal Protection, Exposure Guidelines

Engineering Controls:	In poorly ventilated areas, provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective threshold limit values.
Personal Protective Equipment:	Non-vented chemical goggles should be worn to protect against splashing of product into eyes, and to prevent eye irritation from the solvent vapours. Impervious gloves and clothing should be worn, as appropriate to protect against skin contact. Neoprene or nitrile material is suggested.
Respiratory Protection:	Under normal conditions, respiratory protection is not required. Respiratory protection may be required in poorly ventilated areas, and under heated conditions. Properly fitted air-purifying masks equipped with organic vapour filters will provide protection at low concentrations. Air-supplied respirators or positive-pressure self-contained breathing apparatus is required when atmospheric concentrations of hydrocarbon vapours are likely to exceed 10x the occupational exposure limit, or when high concentrations of H ₂ S may be present.

Exposure Limits:

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:	dark straw-black liquid; petroleum odour
Odour Threshold:	Not available
Boiling Point:	287°C/548.6°F
Evaporation Rate:	Not available
Melting Point:	-24°C/-11.2F
Freezing Point:	Not available
Specific Gravity:	0.8964
Solubility in Water:	Insoluble in cold water
Vapour Density:	
Vapour Pressure:	Not available
pH:	N/A
Flash Point:	141°C/285.8°F
Volatility (% by volume):	Not available
Coefficient of Water to Oil distribution:	

Section 10: Stability & Reactivity

Chemical Stability:	Yes
Hazardous Polymerization:	Will not occur.
Conditions Of Chemical Instability:	
Incompatible Substances:	Strong acids, strong oxidizers, chlorine
Special Decomposition Products:	CO, CO ₂ , irritant fumes, including SO _x , NO _x , and aldehydes

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: No acute effects known.

Effects Of Chronic Exposure: This product contains small quantities of polycyclic aromatic hydrocarbons. Prolonged contact with these compounds has been associated with the induction of skin and lung tumours. The International Agency for Research on Cancer (IARC) has defined untreated, and mildly treated mineral oils as having sufficient evidence of carcinogenicity.

General Irritancy Of Product: This product may contain trace quantities of hydrogen sulphide (H₂S) gas, which may collect in confined spaces. Acute effects vary with concentration of H₂S released, from mild eye, nose, and throat irritation, at approximately 100ppm, to sudden unconsciousness or death at 500ppm.

Sensitization:

Carcinogenicity:

Reproductive Toxicity:

Teratogenicity:

Embryotoxicity: Not Available

Mutagenicity:

Synergistic Products: Not available

Section 12: Ecological Information

Ecotoxicity: Not Available

Environmental Fate: Not Available

Section 13: Disposal Considerations

Waste Disposal: Dispose of material in accordance with all federal, provincial and local regulations.

Section 14: Transport Information




TDG Classification: Not regulated.

DOT UN Number:

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: June 1, 2008

MSDS Revision Notes:

MSDS Author: HiTech Fluid Systems

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