



## Section 1: Product & Company Information

**Product Name:** Detergent L  
**Chemical Family:** Anionic Surfactant  
**Product Use:** Drilling Fluid Additive

### 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

**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#
Ethylene Glycol	10 - 30%	107-21-1
Triethanolamine	1 - 5%	102-71-6
Alkyl Sulphonic Acid	3 - 7%	27176-93-9

## Section 3: Hazards Identification

**Emergency Overview:** None required.

### Routes of Entry:

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

**Potential Health Effects:**

<b>Skin:</b>	May cause redness, with swelling and pain.
<b>Eye:</b>	Liquid, vapour, and mist causes irritation, experienced as stinging, excessive blinking and tear production, with excessive redness of the conjunctiva. Injury to the cornea is not expected.
<b>Inhalation:</b>	May cause irritation of the nose and throat, with headache, particularly from mist. High vapour concentrations caused, for example, by heating the material in an enclosed and poorly ventilated workplace, may cause nausea, vomiting, headache, dizziness, and irregular eye movements.
<b>Ingestion:</b>	May cause abdominal discomfort or pain, nausea, diarrhea, oligurea, uremia, and central nervous system effects, including irregular eye movement, convulsions, and coma. Cardiac failure and pulmonary edema may develop. Severe kidney damage follows the swallowing of large volumes of ethylene glycol. May be fatal.

**Section 4: First Aid Measures**

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<b>Eye Contact:</b>	Flush with copious amount of water for at least 15 minutes. Seek medical attention.
<b>Skin Contact:</b>	Remove contaminated clothing, and launder before re-use. Wash thoroughly with soap and water. If irritation develops, seek medical attention.
<b>Inhalation:</b>	Evacuate patient to fresh air. If breathing has stopped, administer artificial respiration. If breathing is difficult, administer oxygen. Seek medical attention. If adverse symptoms develop, seek medical attention.
<b>Ingestion:</b>	DO NOT induce vomiting. Administer two glasses of water to drink. Seek immediate medical attention. If medical attention is delayed, and the patient has swallowed a moderate amount, have them drink three to four ounces of hard liquor, such as whiskey.
<b>Other First Aid:</b>	None required.

**Section 5: Fire Fighting Measures**

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**Conditions Of Flammability:**

<b>Extinguishing Media:</b>	Dry chemical, CO <sub>2</sub> , foam, water
<b>Flashpoint:</b>	>100°C
<b>Upper Flammable Limit:</b>	Not determined
<b>Lower Flammable Limit:</b>	Not determined
<b>Autoignition Temperature:</b>	Not determined
<b>Protective Equipment:</b>	Firefighters must wear appropriate breathing apparatus and clothing.
<b>Sensitivity To Impact or Static Discharge:</b>	Not known

**Hazardous Combustion Products:** None known.

**Fire Comment:**

## Section 6: Accidental Release Measures

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

**Spill Cleanup Measures:** Small spills, soak up with absorbent material. Large spills, dike to contain spill to prevent water pollution. Extremely slippery when wet. Return recovered material to plant.

## Section 7: Handling & Storage

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**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

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**Engineering Controls:** Provide mechanical ventilation to prevent dust concentrations, and to reduce potential exposure.

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

**Respiratory Protection:** Recommend NIOSH-approved dust respirator.

**Exposure Limits:** OSHA PEL: CL 50 ppm ACGIH:CL50 ppm (vapour)

Chemical Name	ACGIH TLV-TWA	OSHA PEL-TWA
Ethylene Glycol	CL 50 ppm	CL 50 ppm
Triethanolamine	Not Determined	Not Determined
Alkyl Sulphonic Acid	Not Determined	Not Determined

## Section 9: Physical & Chemical Properties

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**Physical State:** Liquid

**Odour And Appearance:** Blue liquid; glycol odour

**Odour Threshold:** Not determined

**Boiling Point:** 105°C

**Evaporation Rate:** Not determined

**Melting Point:** Not determined

<b>Freezing Point:</b>	Not determined
<b>Specific Gravity:</b>	1.022
<b>Solubility in Water:</b>	Soluble
<b>Vapour Density:</b>	Not determined
<b>Vapour Pressure:</b>	Not determined
<b>pH:</b>	7-8
<b>Flash Point:</b>	>100°C
<b>Volatility (% by volume):</b>	Not determined
<b>Coefficient of Water to Oil distribution:</b>	Not determined

## Section 10: Stability & Reactivity

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<b>Chemical Stability:</b>	Yes
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Conditions Of Chemical Instability:</b>	
<b>Incompatible Substances:</b>	Oxidizing agents, reducing agents, metals, acids, alkali
<b>Special Decomposition Products:</b>	CO <sub>2</sub> , SO <sub>2</sub>

## Section 11: Toxicological Information

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Chemical Name	LD <sub>50</sub> (Oral Rat)	LD <sub>50</sub> (Dermal Rabbit)	LC <sub>50</sub> (Inhalation Rat)
Ethylene Glycol	4700 mg/kg	9530 mg/kg	Not Determined
Triethanolamine	8 g/kg	Not Determined	Not Determined
Alkyl Sulphonic Acid	Not Determined	Not Determined	Not Determined

<b>Effects Of Acute Exposure:</b>	Not determined
<b>Effects Of Chronic Exposure:</b>	Not determined
<b>General Irritancy Of Product:</b>	Medium
<b>Sensitization:</b>	Triethanolamine: Reports of skin sensitisation in workers
<b>Carcinogenicity:</b>	N/A
<b>Reproductive Toxicity:</b>	N/A
<b>Teratogenicity:</b>	Ethylene Glycol: Very toxic
<b>Embryotoxicity:</b>	Not Available
<b>Mutagenicity:</b>	N/A
<b>Synergistic Products:</b>	N/A

## Section 12: Ecological Information

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**Ecotoxicity:** Not Available

**Environmental Fate:** Not Available

## Section 13: Disposal Considerations

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**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

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**TDG Classification:** Not regulated



**DOT UN Number:** Not regulated

**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.

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## Section 16: Additional Information

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**MSDS Revision Date:** June 1, 2008

**MSDS Revision Notes:**

**MSDS Author:** HiTech Fluid Systems

**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.