



DRILLING OIL

MATERIAL SAFETY DATA SHEET

I. PRODUCT INFORMATION AND USE

TRADE NAME	SYNDRIL LITE	Supplier's Name and Address: SynOil Fluids Suite 600, 520-5th Ave SW Calgary, Alberta T2P 3Y7 Phone # (403) 261-2713 Fax# 403-261-3864 24hr line 1-888-479-6645
Synonyms:	NA	
Product Use:	Drilling oil	
WHMIS Classification:	Not controlled	
Version	2.1.2006	

II. HAZARDOUS INGREDIENTS

Hazardous Ingredients	CAS #	%	TLV-TWA 8hr
Light Mineral oil severely hydrotreated	64742-47-8	100	5 mg/m ³ (oil mist) STEL 10 mg/m ³ (oil mist)

III. HEALTH HAZARD INFORMATION

ROUTE OF ENTRY	Ingestion: Yes Inhalation: Yes Skin Contact: Yes Eye Contact: Yes Skin Absorption: Yes
Inhalation:	Negligible breathing hazard at normal temperatures (up to 38°C) or recommended blending temperatures. Elevated temperatures or mechanical action may form vapors, mists or fumes. Inhalation of oil mists or vapors from hot oil may cause irritation of the upper respiratory tract.
Eye:	May cause eye irritation but will not injure eye tissue.
Skin:	Prolonged or repeated contact may cause skin irritation characterized by dermatitis or oil acne.
Ingestion:	Low toxicity; has laxative effect.
Teratogenic:	This product is not expected to be a teratogen or an embryotoxin, based on the available data and the known hazards of the components.
Carcinogenic:	This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens by OSHA.
Mutagenic:	This product is not expected to be a mutagen, based on the available data and the known hazards of the components.

TRADE NAME: SYNDRIL LITE

Sensitizer:	This product is not expected to be a skin sensitizer, based on the available data and the known hazards of the components.
Reproductive Toxin:	This product is not expected to be a reproductive hazard, based on the available data and the known hazards of the components.
Acute Lethality	Acute oral toxicity (LD50): >2000 mg/kg (rat). Acute dermal toxicity (LD50): >2000 mg/kg (rabbit).

IV. EMERGENCY AND FIRST AID PROCEDURES

Inhalation:	Remove victim to fresh air, apply artificial respiration and CPR if needed. Immediately contact physician.
Eye Contact:	Flush with water for a minimum of 15 minutes. Hold eyelids open to ensure effective cleansing. Contact physician.
Skin Contact:	Remove contaminated clothing. Flush area with water for at least 20 minutes. Contact physician.
Ingestion:	Contact physician. Do not induce vomiting. If vomiting occurs have victim lean forward to reduce risk of aspiration.
Special Procedures:	Consult physician and/or Poison Control Centre for all exposures except minor instances of inhalation or skin contact.

V. PROTECTIVE MEASURES

Respiratory Protection:	Where concentrations in air may exceed the occupational exposure limits given in Section 2, use NIOSH approved, half-face or full face organic vapor cartridge respirator or self-contained breathing apparatus.
Protective Equipment / Clothing:	Neoprene or nitrile gloves should be worn if contact likely. Long sleeved clothing should be worn to minimize skin contact. A neoprene or nitrile rain suit may be needed in certain situations (ie: tank cleaning).
Eye Protection:	Monogoggles and/or full face shield if splashing is likely.
Engineering Controls:	For normal application, special ventilation is not necessary. If user's operations generate vapors or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Make-up air should always be supplied to balance air removed by exhaust ventilation. Ensure that eyewash station and safety shower are close to work-station.

VI. LEAK AND SPILL PROCEDURE

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Leak and Spill Procedure:	NAERG96, GUIDE 171, Substances (low to moderate hazard). ELIMINATE ALL IGNITION SOURCES. Avoid contact. Stop leak if without risk. Contain spill. Absorb with inert absorbents, dry clay, or diatomaceous earth. Avoid inhaling dust of diatomaceous earth for it may contain silica in very fine particle size, making this a potential respiratory hazard. Place used absorbent in closed metal containers for later disposal or burn absorbent in a suitable combustion chamber. DO NOT FLUSH TO SEWERS, STREAMS OR OTHER BODIES OF WATER. Check with applicable jurisdiction for specific disposal requirements of spilled material and empty containers. Notify the appropriate authorities immediately.
Waste Disposal:	Comply with Provincial and Federal regulations.
Storage:	Small quantities should be stored in an approved safety solvent container which is stored in a fire-resistant grounded cabinet vented to the atmosphere. Storage tanks should be electrically grounded and vented to the atmosphere. A containment dike should be build around tank.
Special Shipping Instructions:	None known.
TDG Classification:	Not controlled under TDG (Canada).

VII. PHYSICAL DATA

Physical State:	Liquid	Odour and Appearance:	Water white liquid with petroleum odour.
API Gravity:	45.6	Vapour Pressure(RVP) :	0.04 kpa @ 37.8°C
Vapour Density (Air = 1):	6.5	pH:	NA
Odour Threshold:	NA	Evaporation Rate:	<0.1
Coefficient of Water / Oil Distribution:	NA	Density:	792 kg/m3
Solubility:	<0.01% in water	Boiling Point(°C):	224-254
Viscosity:	1.3-2.2cSt @40oC	Pour Point (°C)	<-40

VIII. FIRE AND EXPLOSION DATA

Flammable:	May be combustible at high temperatures	Lower Explosive Limit (% by Volume):	0.5
Flash Point (°C and method):	81-83°C (PMCC)	Upper Explosive Limit (% by Volume):	4.9
Auto Ignition Temp. (°C):	250		
Hazardous Combustion Products:	Carbon monoxide, carbon dioxide, and irritating vapors from incomplete combustion.		

TRADE NAME: SYNDRIL LITE

Extinguishing Media:	SMALL FIRE: use DRY chemicals, foam, water spray or CO2. LARGE FIRE: use water spray, fog or foam. For small outdoor fires, portable fire extinguishers may be used, and self contained breathing apparatus (SCBA) may not be required. For all indoor fires and any significant outdoor fires, SCBA is required. Respiratory and eye protection are required for fire fighting personnel.
Unusual Fire / Explosion Hazards:	NAERG96, GUIDE 171, Substances (low to moderate hazard). If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (0.5 mile) in all directions; also, consider initial evacuation for 800 meters (0.5 mile) in all directions. Shut off fuel to fire if it is possible to do so without hazard. If this is impossible, withdraw from area and let fire burn out under controlled conditions. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Cool containing vessels with water spray in order to prevent pressure build-up, autoignition or explosion.
Sensitivity to Impact:	Not known
Sensitivity to Static Discharge:	Yes

IX. REACTIVITY DATA

Chemical Stability:	Normally stable.
Incompatibility:	Strong oxidizing agent.
Hazardous Decomposition Products:	Carbon monoxide, and carbon dioxide.
Conditions to Avoid:	Oxidizing agents.
Hazardous Polymerization:	Will not occur.

X. PREPARATION DATA

Prepared by:	SynOil Fluids Inc	Date:	12/4/2007
Telephone #:	(403) 261-2713		
References:	• Available upon request		

DISCLAIMER ... The information presented in this Material Safety Data Sheet is based on tests, research and reports from the above-mentioned sources, which are believed to be accurate and reliable. The data and information are presented without warranty, guarantee or liability on the part of SynOil Fluids.