

# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT NAME</b>	C-DRILL Drilling Mud Additive
<b>Synonyms</b>	Anionic polyacrylamide in water-in-oil emulsion
<b>Chemical Family</b>	Anionic Polyacrylamide Copolymer
<b>Molecular Formula</b>	Mixture
<b>Molecular Weight</b>	Mixture

<b>PRODUCT CODE</b>	04382
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**MANUFACTURER** Seatex Ltd.  
**STREET ADDRESS** 445 TX -36  
**CITY, STATE ZIP** Rosenberg, TX.77471  
**PHONE** (800) 829- 3020

<b>PRINT DATE</b>	11-24-2009
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**EMERGENCY TELEPHONE NUMBER**  
1-800-535-5053

## SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT/CAS No.	%	EXPOSURE LIMITS		
		OSHA PEL	ACGIH (TLV)	Carcinogen
Product contains one or more of the following ethoxylated alcohols at maximum total concentration of :	5	Not established	Not established	-
Alcohols (C12-16), ethoxylated 68551-12-2	0 - 5	Not established	Not established	-
Alcohols (C10-16), ethoxylated 68002-97-1	0 - 5	Not established	Not established	-
C12-C14 Alcohol ethoxylated 68439-50-9	0 - 5	Not established	Not established	-
Petroleum distillate Hydrotreated light 64742-47-8	24	500 ppm 1200 mg/m3 (Supplier) 165 ppm (Supplier)	(hud)	-

## SECTION 3 – HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

### APPEARANCE AND ODOR

Color	White
Appearance	Viscous Liquid
Odor	Hydrcarbon

**STATEMENTS OF HAZARD**

WARNING!

CAUSES SKIN IRRITATION

**POTENTIAL HEALTH EFFECTS****EFFECTS OF EXPOSURE**

The acute oral (rat) LD50 and dermal (rabbit) LD50 values are >10,000 mg/kg and >10,000 mg/kg, respectively. Direct contact with this material may cause moderate skin and minimal eye irritation. Overexposure to vapor may cause respiratory tract irritation and central nervous system depression. Refer to Section 11 for toxicology information on the regulated components of this product.

**SECTION 4 – FIRST AID MEASURES**

INGESTION	If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
SKIN CONTACT	Remove contaminated clothing and shoes without delay. Wash immediately with plenty of water. Do not reuse contaminated clothing without laundering. Get medical attention if pain or irritation persists after washing or if signs and symptoms of overexposure appear.
EYE CONTACT	Rinse immediately with plenty of water for at least 15 minutes.
INHALATION	Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

**SECTION 5 – FIRE FIGHTING MEASURES**

SUITABLE EXTINGUISHING MEDIA	Use water spray, carbon dioxide or dry chemical.
PROTECTIVE EQUIPMENT	Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing. See MSDS Section 8 (Exposure Controls/Personal Protection).
SPECIAL HAZARDS	Keep containers cool by spraying with water if exposed to fire.

**SECTION 6 – ACCIDENTAL RELEASE MEASURES**

PERSONAL PRECAUTIONS	Where exposure level is known, wear approved respirator suitable for level of exposure. Where exposure level is not known, wear approved, positive pressure, self-contained respirator. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.
METHODS FOR CLEANING UP	Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

**SECTION 7 – HANDLING AND STORAGE**

<b>HANDLING</b>	
PRECAUTIONARY MEASURES	Avoid contact with skin and clothing. Wash thoroughly after handling.
SPECIAL HANDLING STATEMENTS	None
<b>STORAGE</b>	

To avoid product degradation and equipment corrosion, do not use iron, copper or aluminum containers or equipment. Flashpoint determinations on materials of this type are required by certain regulations and scientific standards to be performed using a Pensky-Martens type closed cup test method. This method indicates a flash point greater than 93.3° C (200° F). Although there was no flashpoint detected below 93.3° C (200° F) by the Pensky-Martens Closed Tester method, some flammable vapors were evolved during the test as evidenced by the enlargement of the test flame; therefore, caution should be exercised during storage and handling.

## SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTIONS

ENGINEERING MEASURES:	Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure.
RESPIRATORY PROTECTION	Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure.
EYE PROTECTION	Wear eye-face protection such as chemical splash proof goggles or face shield. Eyewash equipment and safety shower should be provided in areas of potential exposure.
SKIN PROTECTION	Avoid skin contact. Wear impermeable gloves and suitable protective clothing.
ADDITIONAL ADVICE	Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

COLOR	White	SATURATION IN AIR (% by Vol.)	Not available
APPEARANCE	Viscous liquid	EVAPORATION RATE	<1 (Butyl acetate = 1)
ODOR	Hydrocarbon	SOLUBILITY IN WATER	Appreciable
BOILING POINT	~175° C 347° F (value for oil phase)	VOLATILE ORGANIC CONTENT	Not available
MELTING POINT	-18° C 0° F	FLASH POINT	>93o C 200o F Pensky-Martens Closed Cup
VAPOR PRESSURE	Not available	FLAMMABLE LIMITS (% by Vol.)	Not available
SPECIFIC GRAVITY/DENSITY	1.0	AUTOIGNITION TEMPERATURE	Not available
VAPOR DENSITY	Not available	DECOMPOSITION TEMPERATURE	Not available
PERCENT VOLATILE (% by wt.)	~70	PARTITION COEFFICIENT (n-octanol/water)	Not available
pH	Not available	ODOR THRESHOLD	Not available

## SECTION 10 – STABILITY AND REACTIVITY

STABILITY		STABLE	X		UNSTABLE	
CONDITIONS TO AVOID	None Known					
POLYMERIZATION		WILL NOT OCCUR	X		MAY OCCUR	

CONDITIONS TO AVOID	None Known
MATERIALS TO AVOID	Strong oxidizing agents. This material reacts slowly with iron, copper and aluminum, resulting in corrosion and product degradation
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon monoxide, carbon dioxide, ammonia, oxides of nitrogen

## SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicological information for the product is found under Section 3. HAZARDS IDENTIFICATION. Toxicological information on the regulated components of this product is as follows:

Petroleum distillates, hydrotreated light (CAS# 64742-47-8) has acute oral (rat) and dermal (rabbit) LD50 values of >5 g/kg and >3.16 g/kg, respectively. Prolonged or repeated skin contact tends to remove skin oils, possibly leading to irritation and dermatitis. Direct contact may cause eye irritation. Overexposure to high vapor concentrations, >~700 ppm, are irritating to the eyes and respiratory tract and may cause headaches, dizziness, drowsiness, and other central nervous system effects, including death. Aspiration of minute amounts during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death. In a 90-day oral gavage (rats) study at 100, 500, 1000 mg/kg, no treatment-related mortalities were observed. There were no significant changes in body weights or food consumption in any dose groups. Increased liver weights were observed in male and female rats at 500 and 1000 mg/kg. Increased kidney weights were observed only in male rats at 500 and 1000 mg/kg. Testes weights were significantly elevated in male rats at 1000 mg/kg. Kidney effects, indicative of light hydrocarbon nephropathy, occurred in male rat kidneys at all dose levels. Histological findings of hepatocellular hypertrophy were seen in the livers of male rats at 1000 mg/kg and in female rats at 500 and 1000 mg/kg. All treatment-related effects were reversible within the 4-week recovery period. Observed kidney effects (including light hydrocarbon nephropathy and increased kidney weight) are a unique response by male rats to chronic hydrocarbon exposure, which the U.S. EPA has declared 'not relevant to humans'. High-dose liver effects (including hepatocellular hypertrophy, or enlarged liver cells) are a direct consequence of the sustained high-fat 'hydrocarbon diet'. The No Observed Adverse Effect Level (NOAEL) for the study was 1000 mg/kg.

California Proposition 65 Warning (applicable in California only) – This product contains (a) chemical(s) known to the State of California to cause cancer.

## SECTION 12 – ECOLOGICAL INFORMATION

This material is not classified as dangerous for the environment. All ecological information provided was conducted on a structurally similar product. Acute toxicity tests conducted on the polymer using environmentally representative water gave the following results:

ALGAE TEST RESULTS		INVERTEBRATE TEST RESULTS	
Test	Growth Inhibition (OECD 201)	Test	Acute Immobilization (OECD 202)
Duration	72 hr	Duration	48 hr
Species	Green Algae (Selenastrum capricornutum IC50)	Species	Water Flea(Daphnia magna)
>100 mg/l	IC50	>100 mg/l	EC50
FISH TEST RESULTS		DEGRADATION	
Test	Acute toxicity, freshwater (OECD 203)	Test	CO2 Evolution: Modified Sturm (OECD 301 B)
Duration	96 hr	The polymeric ingredient is not readily biodegradable. The	

Species	Zebra Fish ( <i>Brachydanio rerio</i> )	large polymer size is incompatible with transport across biological membranes and diffusion; the bioconcentration factor is therefore considered to be zero.
>100 mg/l	LC50	

## SECTION 13 – DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA 'listed hazardous waste' or has any of the four RCRA 'hazardous waste characteristics'. Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA 'listed hazardous waste'; information contained in Section 15 of this MSDS is not intended to indicate if the product is a 'listed hazardous waste.' RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this MSDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 2 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous waste be disposed of by thermal treatment or incineration at EPA approved facilities. The Company has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

## SECTION 14 – TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

US DOT	Proper Shipping Name: Not applicable/Not regulated Hazardous Substances: Not applicable
TRANSPORT CANADA	Proper Shipping Name: Not applicable/Not regulated
ICAO / IATA	Not applicable/Not regulated Packing Instructions/Maximum Net Quantity Per Package: Passenger Aircraft: Cargo Aircraft:
IMO	Not applicable/Not regulated

## SECTION 15 – REGULATORY INFORMATION

### INVENTORY INFORMATION

United States (USA)	All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.
Canada	All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.
European Union (EU)	All components of this product are included on the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.
Australia	All components of this product are included in the Australian Inventory of Chemical Substances (AICS).
China	All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

Japan	All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese inventory.
Korea	All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.
Philippines	All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

### OTHER ENVIRONMENTAL INFORMATION

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

This product does not contain any components regulated under these sections of the EPA.

### PRODUCT HAZARD CLASSIFICATION UNDER SECTION 311 OF SARA

Acute

## SECTION 16 – OTHER INFORMATION

### NFPA HAZARD RATING (NATIONAL FIRE PROTECTION ASSOCIATION)

Health	<b>2</b>	Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
Fire	<b>1</b>	Materials that must be preheated before ignition can occur.
Reactivity	<b>0</b>	Materials that in themselves are normally stable, even under fire exposure conditions.

Information contained in this MSDS refers only to the specific material designated and does not relate to any process or use involving other materials. This information is based on data believed to be reliable, and the Product is intended to be used in a manner that is customary and reasonably foreseeable. Since actual use and handling are beyond our control, no warranty, express or implied, is made and no liability is assumed by Seatex Ltd. in connection with the use of this information.