



Material Safety Data Sheet

DRILL-THIN ® THINNER

August 31, 2002

MSDS #: 315030

Revision #: 1

CHEVRON PHILLIPS CHEMICAL COMPANY LP
10001 Six Pines Drive
The Woodlands, TX 77380

PHONE NUMBERS

HEALTH:

Chevron Phillips Emergency
Information Center 866.442.9628
(North America) and
1.832.813.4984(International)

TRANSPORTATION:

North America: CHEMTREC 800.424.9300
or 703.527.3887
ASIA: 1.703.527.3887
EUROPE: BIG .32.14.584545 (phone)
or .32.14.583516 (telefax)
SOUTH AMERICA SOS-Cotec
Inside Brazil: 0800.111.767
Outside Brazil: 55.19.3467.1600
Technical Services: (800) 221-1956
For Additional MSDSs: (800) 852-5530

A. Product Identification

Synonyms: Drilling mud additive
Chemical Name: Mixture
Chemical Family: Mixture
Chemical Formula: Mixture
CAS Reg. No.: Mixture
Product No.: Not Established

Product and/or Components Entered on EPA's TSCA Inventory: YES

This product is in U.S. commerce, and is listed in the Toxic Substances Control Act (TSCA) Inventory of Chemicals; hence, it may be subject to applicable TSCA provisions and restrictions.

Canadian Inventory Listing Status

All ingredients are listed in the Domestic Substances List (DSL)
Impurities are exempt in accordance with Section 3 of the Canadian Environmental Protection Act (CEPA).

B. Components

Ingredients	CAS Number	% By Wt.	OSHA PEL	ACGIH TLV
Proprietary ingredients may include:	Various	<100	NE	NE
Crystalline silica	Various	< 1	0.1 mg/m ³	0.1 mg/m ³
Sulfomethylated quebracho	68201-64-9	>70	NE	NE
Monohydrate Ferrous sulfate	17375-41-6	< 9	NE	NE

The specific chemical identity of this material is being withheld as a trade secret. It will be provided in accordance with the provisions of 29 CFR Part 1910.1200(i). In the event of a medical emergency, it will be provided to a treating physician or nurse through utilization of the above Emergency Telephone Number.

C. Personal Protection Information

Ventilation: Local exhaust and mechanical ventilation system is recommended if handled in a confined area. Use adequate ventilation to control below recommended exposure levels.

Respiratory Protection: Use NIOSH/MSHA approved air purifying respirator for protection against dusts having an exposure limit measured as a time weighted average not less than 0.05 milligrams per cubic meter.

Eye Protection: Use chemical goggles.

Skin Protection: Use gloves and protective garments.

NOTE: Personal protection information shown in Section C is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

D. Handling and Storage Precautions

Proper personal protective equipment must be used when handling this chemical.

Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist, fume or dust. Wash thoroughly after handling. Immediately remove and launder contaminated clothing before reuse. Use only with adequate ventilation.

Store in well-ventilated area. Store in closed container.

E. Reactivity Data

Stability: Stable

Conditions to Avoid: Not Established

Incompatibility (Materials to Avoid): Oxidizing agents

Hazardous Polymerization: Will Not Occur

Conditions to Avoid: Not Established

Hazardous Decomposition Products: Sulfur and carbon oxides formed when burned.

F. Health Hazard Data

Recommended Exposure Limits:

See Section B.

Acute Effects of Overexposure:

Eye: May cause severe irritation or burns to the eyes.

Skin: May cause severe irritation.

Inhalation: May cause irritation to the mucous membranes of the nose, throat and upper respiratory tract.

Ingestion: May cause gastrointestinal tract irritation, nausea, vomiting, and diarrhea. Severe poisoning requires immediate medical attention. See Note to Physician under First Aid and Emergency Procedures.

Subchronic and Chronic Effects of Overexposure:

Crystalline silica, a common component of sand, has been reported to cause delayed respiratory disease if inhaled over a prolonged period of time. Crystalline silica has been classified as a probable human carcinogen (2A)

by IARC, the International Agency for Research on Cancer.

Feeding studies using a component showed growth retardation and alterations of pH in body fluids.

Other Health Effects:

Preexisting medical conditions which may be aggravated by exposure include: dermatitis, asthma, conjunctivitis, stomach or digestive problems.

Health Hazard Categories:

	Animal	Human		Animal	Human
Known Carcinogen	<u> X </u>	<u> </u>	Toxic	<u> </u>	<u> </u>
Suspect Carcinogen	<u> </u>	<u> X </u> *	Corrosive	<u> X </u>	<u> X </u>
Mutagen	<u> </u>	<u> </u>	Irritant	<u> </u>	<u> </u>
Teratogen	<u> </u>	<u> </u>	Target Organ Toxin	<u> X </u>	<u> X </u>
Allergic Sensitizer	<u> </u>	<u> </u>	Specify - Lung Toxin		
Highly Toxic	<u> </u>	<u> </u>			

* See Subchronic and Chronic Effects of Overexposure immediately above.

Canadian: WHMIS

CLASS D: POISONOUS AND INFECTIOUS MATERIAL CATEGORIES

1. Materials Causing Immediate and Serious Toxic Effect

- A. Very Toxic
- B. Toxic

2. Materials Causing Other Toxic Effects

- A. Very Toxic
 - 1. Chronic Toxic Effects
 - 2. Teratogen/Embryo Toxin
 - 3. Carcinogen X
 - 4. Reproductive Toxin
 - 5. Respiratory Tract Sensitizer
 - 6. Mutagen
- B. Toxic
 - 1. Chronic Toxic Effects
 - 2. Skin or Eye Irritant
 - 3. Skin Sensitizer
 - 4. Mutagen

Specify: Lung Toxin. Known Animal and Suspect Human Carcinogen.

Other: Corrosive - Class E

First Aid and Emergency Procedures:

Eye: Immediately flush eyes with running water for at least fifteen minutes. Seek medical attention.

Skin: Immediately wash with soap and water. If irritation develops, seek medical attention.

Inhalation: Remove from exposure. If illness or adverse symptoms develop, seek medical attention.

Ingestion: Give two glasses of water and induce vomiting, only if subject is conscious. Seek immediate medical attention.

Note to Physician: This product contains iron salts. In patients not in shock or coma, induce emesis with syrup of ipecac if the patient has not vomited. If gastric lavage is performed as well, add sodium bicarbonate, 20 g/L, and leave sodium bicarbonate solution in the stomach. If severity of poisoning requires chelation therapy, the following is recommended: With deferoxamine, 15 mg/kg/h by continuous intravenous infusion to a maximum of 80 mg/kg in each 12 hour period.

G. Physical Data

Appearance: Fine reddish-brown powder

Odor: Odorless

Boiling Point: Not Applicable

Vapor Pressure: Not Applicable

Vapor Density (Air = 1): Not Applicable

Solubility in Water: Appreciable

Specific Gravity (H₂O = 1): 1.5-1.7

Percent Volatile by Volume: Not Applicable

Evaporation Rate (Butyl Acetate=1): Not Applicable

Viscosity: Not Applicable

H. Fire and Explosion Data

Flash Point (Method Used): Not Applicable

Flammable Limits (% by Volume in Air): LEL - Not Applicable

UEL - Not Applicable

Fire Extinguishing Media: Water, foam, dry chemical or carbon dioxide (CO₂)

Special Fire Fighting Procedures: Evacuate area of all unnecessary personnel. Wear appropriate safety equipment for fire

conditions including NIOSH/MSHA self-contained breathing apparatus (SCBA).

Fire and Explosion Hazards: If in a finely divided and suspended state in air, treat as a flammable dust. Sulfur and carbon oxides are released when burned.

I. Spill, Leak and Disposal Procedures

Precautions Required if Material is Released or Spilled:

Evacuate area of all unnecessary personnel. Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Shut off source, if possible and contain spill. Protect from ignition. Keep out of water sources and sewers. Absorb in a dry, inert material (sand, clay, etc). Transfer to disposal drums using non-sparking equipment.

Waste Disposal (Insure Conformity with all Applicable Disposal Regulations):
Incinerate or place in permitted waste management facility.

J. DOT Transportation

Shipping Name: Not Applicable
Hazard Class: Not Applicable
ID Number: Not Applicable
Packing Group: Not Applicable
Marking: Not Applicable
Label: Not Applicable
Placard: Not Applicable
Hazardous Substance/RQ: Not Applicable
Shipping Description: Not Applicable
Packaging References: Not Applicable

K. RCRA Classification - Unadulterated Product as a Waste

Prior to disposal, consult your Environmental contact to determine if TCLP (Toxicity Characteristic Leaching Procedure, EPA Test Method 1311) is required. Reference 40 CFR Part 261.

L. Protection Required for Work on Contaminated Equipment

Contact immediate supervisor for specific instructions before work is initiated. Wear protective equipment and/or garments described in Section C if exposure conditions warrant.

M. Hazard Classification

This product meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200):

<input type="checkbox"/> Combustible Liquid	<input type="checkbox"/> Flammable Aerosol	<input type="checkbox"/> Oxidizer
<input type="checkbox"/> Compressed Gas	<input type="checkbox"/> Explosive	<input type="checkbox"/> Pyrophoric
<input type="checkbox"/> Flammable Gas	<input checked="" type="checkbox"/> Health Hazard (Section F)	<input type="checkbox"/> Unstable
<input type="checkbox"/> Flammable Liquid	<input type="checkbox"/> Organic Peroxide	<input type="checkbox"/> Water Reactive
<input type="checkbox"/> Flammable Solid		

Based on information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200.

Canadian: WHMIS

Class D-Poisonous and Infectious Material
Division 2. Materials Causing Other Toxic Effects

Class E-Corrosive Material

N. Additional Comments

Environmental Toxicity: Environmental effects testing has been conducted using this and similar products in a generic mud. The tests were conducted according to the 1985 U. S. EPA draft methodology - Drilling Fluid Toxicity Tests. In the test program, Drill-Thin was tested in generic mud #7 at a concentration of 4 ppb (pounds per barrel), where mysid shrimp "Mysidopsis Bahia" were exposed to the suspended particulate phase. The 96-hour LC50 for the mysid shrimp was > 1,000,000 ppm.

SARA 313

As of the preparation date, this product did not contain a chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

NFPA 704 Hazard Codes - - - - - Signals

Health	: 3	Least	- 0
Flammability:	1	Slight	- 1
Reactivity	: 0	Moderate	- 2
Special Haz.:	-	High	- 3
		Extreme	- 4

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by EHS Product Stewardship Group, Chevron Phillips Chemical Company LP, 10001 Six Pines Drive, The Woodlands, TX 77380

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.