

MATERIAL SAFETY DATA SHEET



Drill-Thin® Thinner

Version 1.2

Revision Date 2011-02-24

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product information

Trade name : Drill-Thin® Thinner
Material : 1016816

Use : Drilling Mud Additive

Company : Chevron Phillips Chemical Company LP
Drilling Specialties Company
10001 Six Pines Drive
The Woodlands, TX 77380

Emergency telephone:

Health:

866.442.9628 (North America)
1.832.813.4984 (International)

Transport:

North America: CHEMTREC 800.424.9300 or 703.527.3887
Asia: +800 CHEMCALL (+800 2436 2255) China: 0532.8388.9090
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Chemcare Asia: Tel: +65 6848 9048 - Mob: +65 8382 9188 - Fax: +65 6848
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Responsible Department : Product Safety and Toxicology Group
E-mail address : MSDS@CPChem.com
Website : www.CPChem.com

2. HAZARDS IDENTIFICATION

GHS-Classification

: Eye irritation, Category 2
Carcinogenicity, Category 1A
Chronic aquatic toxicity, Category 3

GHS-Labeling

Symbol(s) :



Signal Word : Danger

Hazard Statements : Causes serious eye irritation.

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May cause cancer.
Harmful to aquatic life with long lasting effects.

Precautionary Statements : **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wash skin thoroughly after handling.
Avoid release to the environment.
Wear protective gloves/ eye protection/ face protection.

Response:
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.

Storage:
Store locked up.

Disposal:
Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Drilling Mud Additive

Molecular formula : Mixture

4. FIRST AID MEASURES

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Do not leave the victim unattended.

If inhaled : Move to fresh air. If symptoms persist, call a physician. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

In case of eye contact : Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed : Gently wipe or rinse the inside of the mouth with water. Induce vomiting immediately and call a physician. Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

5. FIRE-FIGHTING MEASURES

Flash point : Not applicable

Autoignition temperature : No data available

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Unsuitable extinguishing media	: High volume water jet.
Specific hazards during fire fighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Special protective equipment for fire-fighters	: Wear self contained breathing apparatus for fire fighting if necessary.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Fire and explosion protection	: Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.
Hazardous decomposition products	: Carbon oxides. Sulfur oxides.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: Use personal protective equipment. Avoid dust formation. Avoid breathing dust.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods for cleaning up	: Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE**Handling**

Advice on safe handling	: Avoid formation of respirable particles. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.
Advice on protection against fire and explosion	: Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

Storage

Requirements for storage areas and containers	: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Ingredients with workplace control parameters****KR**

Ingredients	Basis	Value	Control parameters	Note
Crystalline Silica	KR OEL	TWA	0,05 mg/m3	Respirable

Personal protective equipment

- Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.
In the case of dust or aerosol formation use respirator with an approved filter. Dust safety masks are recommended when the dust concentration is more than 10 mg/m3.
- Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water. Tightly fitting safety goggles. Wear face-shield and protective suit for abnormal processing problems.
- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties****Appearance**

- Physical state : Solid
Color : Brown
Odor : Odorless

Safety data

- Flash point : Not applicable
Lower explosion limit : Not applicable
Upper explosion limit : Not applicable
Oxidizing properties : No
Autoignition temperature : No data available
Molecular formula : Mixture
Molecular Weight : No data available
pH : No data available
Freezing point : No data available
Pour point : No data available

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Boiling point/boiling range	: Not applicable
Vapor pressure	: Not applicable
Water solubility	: Completely Soluble
Partition coefficient: n-octanol/water	: No data available
Viscosity, kinematic	: Not applicable
Relative vapor density	: Not applicable
Evaporation rate	: Not applicable

10. STABILITY AND REACTIVITY**Possibility of hazardous reactions**

Conditions to avoid	: No data available.
Materials to avoid	: Avoid contact with strong oxidizing agents.
Other data	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION**Drill-Thin® Thinner**

Acute oral toxicity : Acute toxicity estimate: 3.544,44 mg/kg
Method: Calculation method

Acute inhalation toxicity

Sulfomethylated tannin : LC50: > 6,66 mg/l
Exposure time: 4 HR
Species: rat
Sex: male and female
Information given is based on data obtained from similar substances.

Stannous Sulfate LC50: not known
Sulfomethylated tannin LC50: > 6,66 mg/l
Exposure time: 4 HR
Species: rat
Sex: male and female
Information given is based on data obtained from similar substances.

Stannous Sulfate LC50: not known

Acute dermal toxicity

Sulfomethylated tannin : LD50: PNT

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	Species: rabbit
Stannous Sulfate	LD50: not known
Sulfomethylated tannin	LD50: PNT Species: rabbit
Stannous Sulfate	LD50: not known
Drill-Thin® Thinner Skin irritation	: May cause skin irritation in susceptible persons.
Drill-Thin® Thinner Eye irritation	: Eye irritation
Drill-Thin® Thinner Aspiration toxicity	: No aspiration toxicity classification.
Drill-Thin® Thinner Further information	: No data available.

12. ECOLOGICAL INFORMATION**Toxicity to fish**

Sulfomethylated tannin	: LC50: > 1.800 mg/l Exposure time: 96 HR Species: <i>Scophthalmus maximus</i> (Flatfish, Flounder)
Ferrous Sulfate	LL50: > 6,25 mg/l Exposure time: 96 HR Species: <i>Cyprinodon variegatus</i> (sheepshead minnow) Method: OECD Test Guideline 203
Sulfomethylated tannin	LC50: > 1.800 mg/l Exposure time: 96 HR Species: <i>Scophthalmus maximus</i> (Flatfish, Flounder)
Ferrous Sulfate	LL50: > 6,25 mg/l Exposure time: 96 HR Species: <i>Cyprinodon variegatus</i> (sheepshead minnow) Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates.

Sulfomethylated tannin	: EC50: 73,2 mg/l Exposure time: 48 HR Species: <i>Acartia tonsa</i> (Marine Copepod)
Ferrous Sulfate	LC50: 190 mg/l Exposure time: 48 HR Species: <i>Acartia tonsa</i> (Marine Copepod)
Sulfomethylated tannin	EC50: 73,2 mg/l Exposure time: 48 HR Species: <i>Acartia tonsa</i> (Marine Copepod)

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Ferrous Sulfate LC50: 190 mg/l
 Exposure time: 48 HR
 Species: Acartia tonsa (Marine Copepod)

Toxicity to algae

Sulfomethylated tannin : EL50: 79 mg/l
 Exposure time: 72 HR
 Species: Desmodesmus subspicatus (green algae)

Ferrous Sulfate EL50: 45 mg/l
 Exposure time: 72 HR
 Species: Skeletonema costatum (Marine Algae)

Sulfomethylated tannin EL50: 79 mg/l
 Exposure time: 72 HR
 Species: Desmodesmus subspicatus (green algae)

Ferrous Sulfate EL50: 45 mg/l
 Exposure time: 72 HR
 Species: Skeletonema costatum (Marine Algae)

Elimination information (persistence and degradability)

Biodegradability : Not applicable

Further information on ecology

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

The information in this MSDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

14. TRANSPORT INFORMATION

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

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Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the MSDS and the bill of lading.

USDOT

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

IMO / IMDG

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

IATA

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

ADR

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

RID

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

15. REGULATORY INFORMATION**National legislation****Industrial Safety and Health Act**

A Material Safety Datasheet (MSDS) has to be prepared and provided for this product according to article 41 of ISHA.

Regulation	Chemical Name	Threshold limits
Harmful Substances Prohibited from Manufacturing	:	Not relevant
Korea. Harmful Substances Requiring Permission	:	Not relevant

Toxic Chemicals Control Law

Regulation	Chemical Name	Threshold limits
Toxic chemicals, TCCL Article 19	:	Not relevant
Banned Toxic Chemicals TCCL Article 32 & 33	:	Not relevant
Observational chemicals, TCCL Article 31	:	Not relevant
Restricted toxic chemicals TCCL Article 32 & 33	:	Not relevant
Toxic Release Inventory	:	Not relevant

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Chemicals

Dangerous Substances Safety Management Act:

Dangerous Substances : Not relevant
 Safety Management Act:

Notification status

Europe REACH : On the inventory, or in compliance with the inventory
 United States of America US.TSCA : On the inventory, or in compliance with the inventory
 Canada DSL : On the inventory, or in compliance with the inventory
 Australia AICS : On the inventory, or in compliance with the inventory
 New Zealand NZIoC : Not in compliance with the inventory
 Japan ENCS : Not in compliance with the inventory
 Korea KECI : On the inventory, or in compliance with the inventory
 Philippines PICCS : Not in compliance with the inventory
 China IECSC : On the inventory, or in compliance with the inventory

16. OTHER INFORMATION**Further information**

Legacy MSDS Number : 315030

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this MSDS pertains only to the product as shipped.

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.

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LOAEL	Lowest Observed Adverse Effect Level
AICS	Australia, Inventory of Chemical Substances	NFPA	National Fire Protection Agency
DSL	Canada, Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
NDSL	Canada, Non-Domestic Substances List	NTP	National Toxicology Program
CNS	Central Nervous System	NZIoC	New Zealand Inventory of Chemicals
CAS	Chemical Abstract Service	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration	NOEC	No Observed Effect Concentration
EC50	Effective Concentration 50%	OSHA	Occupational Safety & Health Administration
EINECS	European Inventory of Existing Chemical Substances	PEL	Permissible Exposure Limit
MAK	Germany Maximum Concentration Values	PICCS	Philippines Inventory of Commercial Chemical Substances
GHS	Globally Harmonized System	PRNT	Presumed Not Toxic
>=	Greater Than or Equal To	RCRA	Resource Conservation Recovery Act
IC50	Inhibition Concentration 50%	STEL	Short-term Exposure Limit
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments and Reauthorization Act.

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IECSC	Inventory of Existing Chemical Substances in China	TLV	Threshold Limit Value
ENCS	Japan, Inventory of Existing and New Chemical Substances	TWA	Time Weighted Average
KECI	Korea, Existing Chemical Inventory	TSCA	Toxic Substance Control Act
<=	Less Than or Equal To	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
LC50	Lethal Concentration 50%	WHMIS	Workplace Hazardous Materials Information System
LD50	Lethal Dose 50%		