

DrisFlex™ Additive

Version 1.6 Revision Date 2019-08-27

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product information

Product Name : DrisFlex™ Additive Material : 1120910, 1119765

Company : Chevron Phillips Chemical Company LP

Drilling Specialties Company LLC

10001 Six Pines Drive The Woodlands, TX 77380

Emergency telephone:

Health:

866.442.9628 (North America) 1.832.813.4984 (International)

Transport:

CHEMTREC 800.424.9300 or 703.527.3887(int'l)

Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090 EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Mexico CHEMTREC 01-800-681-9531 (24 hours)

South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Argentina: +(54)-1159839431

Responsible Department : Product Safety and Toxicology Group

E-mail address : SDS@CPChem.com Website : www.CPChem.com

SECTION 2: Hazards identification

Classification of the substance or mixture

This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

Classification

:

Not a hazardous substance or mixture.

Labeling

Not a hazardous substance or mixture.

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Carcinogenicity:

IARC No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

NTP No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

SECTION 3: Composition/information on ingredients

| Component | CAS-No. | Weight % |
|------------------------------------|------------|----------|
| Ethoxylated, C9-C11-Iso-, C10-Rich | 78330-20-8 | 0 - 3 |
| Alcohols | | |

SECTION 4: First aid measures

General advice : No hazards which require special first aid measures.

If inhaled : If unconscious, place in recovery position and seek medical

advice. If symptoms persist, call a physician.

In case of eye contact : Remove contact lenses. Protect unharmed eye. If eye

irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear. Do not give milk or alcoholic

beverages. Never give anything by mouth to an unconscious

person. If symptoms persist, call a physician.

SECTION 5: Firefighting measures

Flash point : Not applicable

Suitable extinguishing

media

: In case of fire, use water/water spray/water jet/carbon

dioxide/sand/foam/alcohol resistant foam/chemical powder for

extinction.

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 firefighting if

necessary.

Further information : Standard procedure for chemical fires. Use extinguishing

measures that are appropriate to local circumstances and the

surrounding environment.

Fire and explosion

protection

: Normal measures for preventive fire protection.

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SECTION 6: Accidental release measures

Personal precautions : Refer to protective measures listed in sections 7 and 8.

Environmental precautions : If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece). Keep in

suitable, closed containers for disposal.

SECTION 7: Handling and storage

Handling

Advice on safe handling : For personal protection see section 8. Smoking, eating and

drinking should be prohibited in the application area.

Advice on protection against fire and explosion

: Normal measures for preventive fire protection.

Storage

Requirements for storage areas and containers

: Electrical installations / working materials must comply with the

technological safety standards.

Advice on common storage : No materials to be especially mentioned.

SECTION 8: Exposure controls/personal protection

Hazardous components without workplace control parameters

Engineering measures

Adequate ventilation to control airborned concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection : Wear a supplied-air NIOSH approved respirator unless

ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Use a positive pressure, airsupplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate

protection.

Hand protection : The suitability for a specific workplace should be discussed

with the producers of the protective gloves. Please observe

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the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : Eye wash bottle with pure water. Tightly fitting safety goggles.

Skin and body protection : Choose body protection in relation to its type, to the

concentration and amount of dangerous substances, and to the

specific work-place.

Hygiene measures : General industrial hygiene practice.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Form : Liquid
Physical state : Liquid
Color : White
Odor : Slight

Odor Threshold : not determined

Safety data

Flash point : Not applicable

Lower explosion limit : Not applicable

Upper explosion limit : Not applicable

pH : 8.0

at

20 °C (68 °F)

Melting point/freezing point : No data available

Boiling point/boiling range : No data available

Vapor pressure : ca.23.00 hPa

at 20 °C (68 °F)

Relative density : 0.9 - 1.1

Water solubility : Miscible

Partition coefficient: n-

: No data available

octanol/water

Viscosity, dynamic : 30 mPa.s

Relative vapor density : No data available

Evaporation rate : No data available

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SECTION 10: Stability and reactivity

Reactivity: No decomposition if stored and applied as directed.

Chemical stability : This material is considered stable under normal ambient and

anticipated storage and handling conditions of temperature

and pressure.

Possibility of hazardous reactions

Hazardous reactions : Further information: Stable under recommended storage

conditions., No hazards to be specially mentioned.

Conditions to avoid : No data available.

Other data : No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

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Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

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Skin irritation : No skin irritation.

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Eye irritation : May irritate eyes. largely based on animal evidence.

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Sensitization : Does not cause sensitization.

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Further information : No adverse effects expected.

SECTION 12: Ecological information

Toxicity to fish

Ethoxylated, C9-C11-lso-, : LC50: > 10 - 100 mg/l C10-Rich Alcohols : Exposure time: 96 h

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates

Ethoxylated, C9-C11-Iso-, : EC50: > 100 mg/l

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C10-Rich Alcohols Exposure time: 48 h

Species: Daphnia

Method: QSAR modeled data

Toxicity to algae

Ethoxylated, C9-C11-Iso-, : C10-Rich Alcohols

: EC50: 96.3 mg/l Exposure time: 96 h

Method: QSAR modeled data

Biodegradability : This material is not expected to be readily biodegradable.

Elimination information (persistence and degradability)

Bioaccumulation

Ethoxylated, C9-C11-Iso-,

C10-Rich Alcohols

: No data available

Mobility

Ethoxylated, C9-C11-Iso-,

C10-Rich Alcohols

: Substance does not evaporate from water surface into the

atmosphere.

Adsorption to solid soil phase is possible.

Additional ecological

information

: This material is not expected to be harmful to aquatic

organisms.

Ecotoxicology Assessment

Short-term (acute) aquatic

hazard

: This material is not expected to be harmful to aquatic

organisms.

SECTION 13: Disposal considerations

The information in this SDS 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.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

SECTION 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).

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 SDS and the

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bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

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

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

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

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

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

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))

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

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))

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

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

National legislation

SARA 311/312 Hazards : No SARA Hazards

EPCRA - EMERGENCY PLANNING COMMUNITY RIGHT - TO - KNOW

CERCLA Reportable

Quantity

: This material does not contain any components with a CERCLA

RQ.

SARA 302 Reportable : This material does not contain any components with a SARA

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Quantity 302 RQ.

SARA 302 Threshold Planning Quantity SARA 304 Reportable : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

This material does not contain any components with a section

304 EHS RQ.

SARA 313 Components

: This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

Quantity

Ozone-Depletion Potential

: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR

82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

US State Regulations

Pennsylvania Right To Know

: No components are subject to the Pennsylvania Right to Know

Act.

California Prop. 65

Components

: This product does not contain any chemicals known to the State

of California to cause cancer, birth, or any other reproductive

defects.

Notification status

Europe REACH : On the inventory, or in compliance with the inventory

Switzerland CH INV : Not in compliance with the inventory

United States of America (USA) : On or in compliance with the active portion of the

TSCA TSCA inventory

Canada DSL : All components of this product are on the Canadian

DSL

Australia AICS : On the inventory, or in compliance with the inventory New Zealand NZIoC : On the inventory, or in compliance with the inventory

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Japan ENCS : On the inventory, or in compliance with the inventory

Korea KECI : A substance(s) in this product was not registered,

notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has

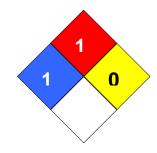
themselves notified the substance.

Philippines PICCS : On the inventory, or in compliance with the inventory China IECSC : On the inventory, or in compliance with the inventory Taiwan TCSI : On the inventory, or in compliance with the inventory

SECTION 16: Other information

NFPA Classification : Health Hazard: 1

Fire Hazard: 1 Reactivity Hazard: 0



Further information

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

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

| Key or legend to abbreviations and acronyms used in the safety data sheet | | | | |
|---|---|-------|---|--|
| ACGIH | American Conference of Government Industrial Hygienists | LD50 | Lethal Dose 50% | |
| AICS | Australia, Inventory of Chemical Substances | LOAEL | Lowest Observed Adverse Effect Level | |
| DSL | Canada, Domestic Substances List | NFPA | National Fire Protection Agency | |
| NDSL | Canada, Non-Domestic Substances List | NIOSH | National Institute for Occupational Safety & Health | |
| CNS | Central Nervous System | NTP | National Toxicology Program | |
| CAS | Chemical Abstract Service | NZIoC | New Zealand Inventory of Chemicals | |
| EC50 | Effective Concentration | NOAEL | No Observable Adverse Effect Level | |
| EC50 | Effective Concentration 50% | NOEC | No Observed Effect Concentration | |
| EGEST | EOSCA Generic Exposure Scenario Tool | OSHA | Occupational Safety & Health Administration | |
| EOSCA | European Oilfield Specialty Chemicals Association | PEL | Permissible Exposure Limit | |
| EINECS | European Inventory of Existing Chemical Substances | PICCS | Philippines Inventory of Commercial Chemical Substances | |
| MAK | Germany Maximum Concentration Values | PRNT | Presumed Not Toxic | |

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| GHS | Globally Harmonized System | RCRA | Resource Conservation Recovery Act |
|-------|--|-------|--|
| >= | Greater Than or Equal To | STEL | Short-term Exposure Limit |
| IC50 | Inhibition Concentration 50% | SARA | Superfund Amendments and Reauthorization Act. |
| IARC | International Agency for Research on Cancer | TLV | Threshold Limit Value |
| IECSC | Inventory of Existing Chemical Substances in China | TWA | Time Weighted Average |
| ENCS | Japan, Inventory of Existing and New Chemical Substances | TSCA | Toxic Substance Control Act |
| KECI | Korea, Existing Chemical Inventory | UVCB | Unknown or Variable Composition, Complex Reaction Products, and Biological Materials |
| <= | Less Than or Equal To | WHMIS | Workplace Hazardous Materials Information System |
| LC50 | Lethal Concentration 50% | | |

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