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

1.1

Product information

Product Name: DSCO™ Defoam
Material: 1016819

EC-No. Registration number

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No. EC-No. Index No.</th>
<th>Legal Entity Registration number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene oxide</td>
<td>75-56-9 200-879-2 603-055-00-4</td>
<td>Chevron Phillips Chemicals International NV 01-2119480483-35-0052</td>
</tr>
</tbody>
</table>

1.3

Details of the supplier of the safety data sheet

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

Local: Chevron Phillips Chemicals International N.V.
Airport Plaza (Stockholm Building)
Leonardo Da Vinciлаan 19
1831 Diegem
Belgium

SDS Requests: (800) 852-5530
Technical Information: (832) 813-4862
Responsible Party: Product Safety Group
Email:sds@cpchem.com

1.4

Emergency telephone:

Health: 866.442.9628 (North America)
DSCO™ Defoam

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

2.1 Classification of the substance or mixture
REGULATION (EC) No 1272/2008

Not a hazardous substance or mixture.

2.2 Labeling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

3.1 - 3.2 Substance or Mixture

Synonyms: None established
Molecular formula: (C3H6O)nH2O

Contains no hazardous ingredients according to GHS.

Remarks: Contains no hazardous ingredients according to GHS.

SECTION 4: First aid measures

4.1 Description of 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 skin contact: If on skin, rinse well with water. If on clothes, remove clothes.
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: 185 °C (365 °F)
Autoignition temperature: No data available

5.1 Extinguishing media
Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture
Specific hazards during firefighting: Standard procedure for chemical fires.

5.3 Advice for firefighters
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.
Hazardous decomposition products: Carbon oxides.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal precautions: Use personal protective equipment.

6.2 Environmental precautions
Environmental precautions: If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up
Methods for cleaning up: Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
Reference to other sections: For personal protection see section 8. For disposal considerations see section 13.
# DSCO™ Defoam

## SAFETY DATA SHEET

### Version 1.4

**Revision Date 2019-08-12**

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Handling**

Advice on safe handling: Avoid inhalation of vapor or mist. 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: Normal measures for preventive fire protection.

### 7.2 Conditions for safe storage, including any incompatibilities

**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

### 8.2 Exposure controls

**Engineering measures**

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the workplace 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.

**Hand protection**

The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe 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.
DSCO™ Defoam

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

Skin and body protection : Wear as appropriate: Choose body protection according to the amount and concentration of the dangerous substance at the work place. Lightweight protective clothing.

Hygiene measures : General industrial hygiene practice.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance
Form : Liquid
Physical state : Liquid
Color : Clear to light amber
Odor : Slight

Safety data
Flash point : 185 °C (365 °F)
Lower explosion limit : No data available
Upper explosion limit : No data available
Oxidizing properties : No
Autoignition temperature : No data available
Thermal decomposition : No data available

Molecular formula : (C3H6O)nH2O
Molecular weight : Not applicable
pH : Not applicable
Pour point : No data available

Boiling point/boiling range : No data available
Vapor pressure : Not applicable
Relative density : 1
   at 25 °C (77 °F)
Water solubility : Partly soluble
Partition coefficient: n-octanol/water : No data available
Viscosity, kinematic : No data available
Relative vapor density : No data available
Evaporation rate : No data available
Percent volatile: < 0.1 %

SECTION 10: Stability and reactivity

10.1 Reactivity: Stable at normal ambient temperature and pressure.

10.2 Chemical stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Hazardous reactions: Hazardous polymerization does not occur.

Further information: Stable under recommended storage conditions., No hazards to be specially mentioned.

10.4 Conditions to avoid: High Temperatures.

10.5 Materials to avoid: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Thermal decomposition: No data available

10.6 Hazardous decomposition products: Carbon oxides

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

DSCO™ Defoam
Acute oral toxicity: LD50: > 2.000 mg/kg
Species: Rat
Method: OECD Test Guideline 401

DSCO™ Defoam
Acute dermal toxicity: LD50: > 3.000 mg/kg
Species: Rabbit
Method: OECD Test Guideline 402
DSCO™ Defoam

Skin irritation: No skin irritation

Sensitization: Did not cause sensitization on laboratory animals.

SECTION 12: Ecological information

12.1 Toxicity

Ecotoxicity effects

Toxicity to fish: LC50: > 100 mg/l
Exposure time: 96 h
Species: Danio rerio (Zebra Fish)
static test Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates: > 100 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
static test Method: OECD Test Guideline 202

Toxicity to algae: EC50: > 100 mg/l
Exposure time: 72 h
Species: Desmodesmus subspicatus (green algae)
static test Method: OECD Test Guideline 201

12.2 Persistence and degradability

Biodegradability: aerobic
Result: Readily biodegradable.
86.6 %
Testing period: 28 d
Method: OECD Test Guideline 301F

12.3 Bioaccumulative potential

Elimination information (persistence and degradability)

Bioaccumulation: This material is not expected to bioaccumulate.

12.4 Mobility in soil

Mobility: No data available

12.5 Results of PBT and vPvB assessment

Results of PBT assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or
very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
Ecotoxicology Assessment

<table>
<thead>
<tr>
<th>hazard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term (acute) aquatic hazard</td>
<td>This material is not expected to be harmful to aquatic organisms.</td>
</tr>
<tr>
<td>Long-term (chronic) aquatic hazard</td>
<td>This material is not expected to be harmful to aquatic organisms.</td>
</tr>
</tbody>
</table>

SECTION 13: Disposal considerations

13.1 Waste treatment methods
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

14.1 - 14.7 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 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.
## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National legislation


Water contaminating class (Germany): WGK 1 slightly water endangering

Classifications, planned by the commission, but not yet included in the VwVwS are classified as "KBwS-Beschluss"

In the KBwS-Beschluss a new chemical name is proposed:

"Kondensationsprodukte von mehrwertigen aliphatischen Alkoholen oder Kohlehydraten oder 1,2-Ethylenediamin oder Triethanolamin mit Ethylenoxid und/oder Propylenoxid"

### 15.2 Major Accident Hazard Legislation

<table>
<thead>
<tr>
<th>Country</th>
<th>Legislation</th>
<th>Update</th>
<th>Notification status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>REACH</td>
<td></td>
<td>This mixture contains only ingredients which have been registered according to Regulation (EU) No. 1907/2006 (REACH).</td>
</tr>
<tr>
<td>Switzerland</td>
<td>CH INV</td>
<td></td>
<td>On the inventory, or in compliance with the inventory</td>
</tr>
<tr>
<td>United States of America</td>
<td>TSCA</td>
<td></td>
<td>On or in compliance with the active portion of the TSCA inventory</td>
</tr>
<tr>
<td>Canada</td>
<td>DSL</td>
<td></td>
<td>All components of this product are on the Canadian DSL</td>
</tr>
<tr>
<td>Australia</td>
<td>AICS</td>
<td></td>
<td>On the inventory, or in compliance with the inventory</td>
</tr>
</tbody>
</table>

Notification status:

- Europe: REACH
- Switzerland: CH INV
- United States of America (USA): TSCA
- Canada: DSL
- Australia: AICS

This mixture contains only ingredients which have been registered according to Regulation (EU) No. 1907/2006 (REACH).

Directive 96/82/EC does not apply

Update 2003
New Zealand NZIoC: On the inventory, or in compliance with the inventory Notification number: HSR003037
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: 0
Fire Hazard: 1
Reactivity Hazard: 0

Further information
Legacy SDS Number: 430500

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

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Government Industrial Hygienists</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal Dose 50%</td>
</tr>
<tr>
<td>AICS</td>
<td>Australia, Inventory of Chemical Substances</td>
</tr>
<tr>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
<tr>
<td>DSL</td>
<td>Canada, Domestic Substances List</td>
</tr>
<tr>
<td>NFPA</td>
<td>National Fire Protection Agency</td>
</tr>
<tr>
<td>NDSL</td>
<td>Canada, Non-Domestic Substances List</td>
</tr>
<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>CNS</td>
<td>Central Nervous System</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service</td>
</tr>
<tr>
<td>NZIoC</td>
<td>New Zealand Inventory of Chemicals</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective Concentration</td>
</tr>
<tr>
<td>NOAEL</td>
<td>No Observable Adverse Effect Level</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective Concentration 50%</td>
</tr>
<tr>
<td>NOEC</td>
<td>No Observed Effect Concentration</td>
</tr>
<tr>
<td>EGEST</td>
<td>EOSCA Generic Exposure Scenario Tool</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety &amp; Health Administration</td>
</tr>
<tr>
<td>EOSCA</td>
<td>European Oilfield Specialty</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
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</table>

SDS Number: 100000068086 10/11
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Chemical Substances</td>
</tr>
<tr>
<td>PICCS</td>
<td>Philippines Inventory of Commercial Chemical Substances</td>
</tr>
<tr>
<td>MAK</td>
<td>Germany Maximum Concentration Values</td>
</tr>
<tr>
<td>PRNT</td>
<td>Presumed Not Toxic</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System</td>
</tr>
<tr>
<td>RCRA</td>
<td>Resource Conservation Recovery Act</td>
</tr>
<tr>
<td>&gt;=</td>
<td>Greater Than or Equal To</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-term Exposure Limit</td>
</tr>
<tr>
<td>IC50</td>
<td>Inhibition Concentration 50%</td>
</tr>
<tr>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>IECSC</td>
<td>Inventory of Existing Chemical Substances in China</td>
</tr>
<tr>
<td>TWA</td>
<td>Time Weighted Average</td>
</tr>
<tr>
<td>ENCS</td>
<td>Japan, Inventory of Existing and New Chemical Substances</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substance Control Act</td>
</tr>
<tr>
<td>KECI</td>
<td>Korea, Existing Chemical Inventory</td>
</tr>
<tr>
<td>UVCB</td>
<td>Unknown or Variable Composition, Complex Reaction Products, and Biological Materials</td>
</tr>
<tr>
<td>&lt;=</td>
<td>Less Than or Equal To</td>
</tr>
<tr>
<td>WHMIS</td>
<td>Workplace Hazardous Materials Information System</td>
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<tr>
<td>LC50</td>
<td>Lethal Concentration 50%</td>
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</tbody>
</table>