



## Safety Data Sheet D-D\*

### 1. Identification of the Substance/Preparation and of the Company/Undertaking

#### 1.1 Product identifier

**Product name** D-D\*  
**Product code** PID434  
**Synonyms** D-D EXPORT, D-D (w/spout)

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Drilling fluid additive. Lubricant.  
**Uses advised against** Consumer use

#### 1.3 Details of the supplier of the safety data sheet

##### Supplier

**M-I L.L.C.**  
P.O.Box 42842  
Houston, TX 77242  
www.miswaco.slb.com  
Telephone: 1 281-561-1511

##### Schlumberger Canada, Ltd.

200, 125 - 9th Avenue SE  
Calgary, Alberta T2G 0P6, Canada  
Telephone: 1-613-992-4624

**E-mail address** sdsmi@slb.com

##### Prepared by

Global Regulatory Compliance - Chemicals (GRC - Chemicals)

#### 1.4 Emergency Telephone Number

**Emergency telephone** (24 Hour) Asia Pacific +65 3158 1074, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, USA +1 281 561 1600, Canada +1 800 579 7421, Argentina: +54 11 5984 3690, Brazil : 0800-720-8000/0800-777-2323 (WGRA)

### 2. Hazards Identification

#### 2.1 Classification of the substance or mixture

##### GHS - Classification

##### Health hazards

Serious eye damage/eye irritation	Category 1
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**Environmental hazards** Not classified

**Physical Hazards** Not classified

## 2.2 Label elements



### Signal word

DANGER

### Hazard Statements

H318 - Causes serious eye damage

### Precautionary Statements

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear eye protection/ face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

### **Hazards not otherwise classified**

None known

**Unknown acute toxicity** Not applicable.

## **3. Composition/information on Ingredients**

### 3.1 Substances

Not applicable

### 3.2 Mixtures

Chemical Name	CAS No	Weight-%
Amides, C8-18 and C18-unsaturated, N,N-bis(hydroxyethyl)	68155-07-7	3 - 7
Fatty acids, C8-18 and C18-unsaturated, compounds with diethanolamine	68604-35-3	1 - 5
Propan-2-ol	67-63-0	1 - 5

### **Comments**

The product contains other ingredients which do not contribute to the overall classification. The exact percentage (concentration) of composition has been withheld as a trade secret. The exact percentage (concentration) of composition has been withheld as a trade secret.

**Hazardous Material Information Review Act registry number (HMIRA registry #)** 11392

**Filing Date:** 12/May/2017

## 4. First Aid Measures

### 4.1 First aid measures

<b>Inhalation</b>	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Seek medical attention if irritation occurs.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation persists.
<b>Eye Contact</b>	Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses, if worn. Continue to rinse for at least 15 minutes. Seek medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

**General advice** The severity of the symptoms described will vary dependant of the concentration and the length of exposure. If adverse symptoms develop, the casualty should be transferred to hospital as soon as possible.

#### **Symptoms**

<b>Inhalation</b>	Please see Section 11. Toxicological Information for further information.
<b>Ingestion</b>	Please see Section 11. Toxicological Information for further information.
<b>Skin contact</b>	Please see Section 11. Toxicological Information for further information.
<b>Eye contact</b>	Please see Section 11. Toxicological Information for further information.

### 4.3 Indication of any immediate medical attention and special treatment needed

**Notes to physician** Treat symptomatically

## 5. Fire-Fighting Measures

### 5.1 Extinguishing media

#### **Suitable extinguishing media**

Use extinguishing media appropriate for surrounding material.

#### **Extinguishing media which must not be used for safety reasons**

None known.

### 5.2. Special hazards arising from the substance or mixture

#### **Unusual fire and explosion hazards**

None known.

#### **Hazardous combustion products**

Thermal decomposition can lead to release of irritating gases and vapors, Carbon oxides (COx), Nitrogen oxides (NOx).

### 5.3 Advice for firefighters

**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus and full protective gear.

**Special Fire-Fighting Procedures**

Containers close to fire should be removed immediately or cooled with water.

**6. Accidental Release Measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate and ventilate the area. Use personal protective equipment. Do not get in eyes, on skin, or on clothing.

**6.2 Environmental precautions**

The product should not be allowed to enter drains, water courses or the soil.

**Environmental exposure controls**

Avoid release to the environment. Local authorities should be advised if significant spillages cannot be contained.

**6.3 Methods and material for containment and cleaning up**

**Methods for containment**

Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up**

Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. After cleaning, flush away traces with water.

**6.4 Reference to other sections**

See section 13 for more information. See section 8 for more information.

**7. Handling and Storage**

**7.1 Precautions for safe handling**

**Handling**

Handle in accordance with good industrial hygiene and safety practice. Do not get in eyes, on skin or on clothing. Do not breathe vapors or spray mist. Avoid spills and splashing during use.

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

**Technical measures/precautions** Ensure adequate ventilation. Keep airborne concentrations below exposure limits.

**Storage precautions** Keep containers tightly closed in a dry, cool and well-ventilated place. Avoid frost.

**Packaging materials** Plastic container Use specially constructed containers only.

**8. Exposure Controls/Personal Protection**

**8.1 Control parameters**

Chemical Name	ACGIH TLV	OSHA PEL	Argentina - Occupational Exposure Limits - TWAs (CMPs)	Brazil - Occupational Exposure Limits - TWAs (LTs)	Mexico - Occupational Exposure Limits - TWAs (LMPE-PPTs)
Amides, C8-18 and C18-unsaturated, N,N-bis(hydroxyethyl)	Not determined	Not determined	Not determined	Not determined	Not determined
Fatty acids, C8-18 and C18-unsaturated, compounds with diethanolamine	Not determined	Not determined	Not determined	Not determined	Not determined

Propan-2-ol	200 ppm	400 ppm TWA 980 mg/m <sup>3</sup> TWA	400 ppm TWA	310 ppm TWA LT; 765 mg/m <sup>3</sup> TWA LT	200 ppm TWA VLE-PPT
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**IDLH (Immediately Dangerous to Life or Health)**

Immediately Dangerous to Life or Health (IDLH) is established by the US National Institute for Occupational Safety and Health (NIOSH). The purpose of establishing an IDLH value is to ensure that the worker can escape from a given contaminated environment in the event of failure of the most protective respiratory protection equipment. In the event of failure of respiratory protection equipment every effort should be made to exit immediately.

Chemical Name	IDLH (Immediately Dangerous to Life or Health)
Amides, C8-18 and C18-unsaturated, N,N-bis(hydroxyethyl) 68155-07-7	-
Fatty acids, C8-18 and C18-unsaturated, compounds with diethanolamine 68604-35-3	-
Propan-2-ol 67-63-0	2000 ppm IDLH (10% LEL)

**8.2 Exposure controls**

A risk assessment is recommended to be performed by a qualified and trained personnel to analyze the worksite and recommends the appropriate controls such as engineering controls, work practice controls, and administrative controls as primary means of reducing employee exposure. When there is a remaining hazards after applying the primary controls, Personal Protective Equipment (PPE) must be used.

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created and as such further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.

**Engineering Controls**

Ensure adequate ventilation. Provide mechanical general and/or local exhaust ventilation to prevent release of vapor or mist into work environment.

**Personal protective equipment**

**Eye protection**

Tightly fitting safety goggles. Face-shield.

**Hand protection**

Use protective gloves made of: Neoprene Nitrile Be aware that liquid may penetrate the gloves. Frequent change is advisable.

**Respiratory Protection**

All respiratory protection equipment should be used within a comprehensive respiratory protection program that meets the requirements of 29 CFR 1910.134 (U.S. OSHA Respiratory Protection Standard) or local equivalent. If exposed to airborne mist/aerosol of this product, use an organic vapor cartridge with a P-95 pre-filter attached. In work environments containing oil mist/aerosol, use an organic vapor cartridge with a P-95 pre-filter attached. If exposed to vapors from this product, use a NIOSH/MSHA-approved respirator with an organic vapor cartridge.

**Skin and body protection**

Wear suitable protective clothing, Eye wash and emergency shower must be available at the work place.

**Hygiene Measures**

Wash hands before eating, drinking or smoking, Remove and wash contaminated clothing before re-use.

**9. Physical and Chemical Properties**

**9.1 Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear
<b>Color</b>	Colorless - Green

**Odor** Slight Lemon  
**Odor threshold** Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
<b>pH</b>	8.0	
<b>pH @ dilution</b>	8.2	@ 1%
<b>Melting / freezing point</b>	No information available	
<b>Boiling point/range</b>	100 °C / 212 °F	
<b>Flash point</b>	94 °C / 201 °F	P/M Pensky-Martens
<b>Evaporation rate (BuAc =1)</b>	No information available	
<b>Flammability (solid, gas)</b>	Not applicable	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit</b>	No information available	
<b>Lower flammability limit</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific gravity</b>	1.01 - 1.02	@ 20 °C
<b>Bulk density</b>	No information available	
<b>Water solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>log Pow</b>	Not determined	
<b>Explosive properties</b>	Not applicable	
<b>Oxidizing properties</b>	None known.	

**9.2 Other information**

<b>Pour point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC content(%)</b>	None
<b>Density</b>	No information available

**Comments**

The data listed above are typical physical and chemical properties and should not be construed as product specification.

## 10. Stability and Reactivity

**10.1 Reactivity**

No specific reactivity hazards associated with this product.

**10.2 Chemical stability**

Stable under normal temperature conditions and recommended use.

**10.3 Possibility of Hazardous Reactions**

**Hazardous polymerization**

Hazardous polymerization does not occur.

**10.4 Conditions to avoid**

Protect from freezing.

**10.5 Incompatible materials**

No materials to be especially mentioned.

**10.6 Hazardous decomposition products**

See Section 5.2.

## 11. Toxicological Information

### 11.1 Information on toxicological effects

<b>Acute toxicity</b>	
<b>Inhalation</b>	Inhalation of vapors in high concentration may cause irritation of respiratory system.
<b>Eye contact</b>	Corrosive to the eyes and may cause severe damage including blindness.
<b>Skin contact</b>	Prolonged contact may cause redness and irritation.
<b>Ingestion</b>	Ingestion may cause stomach discomfort.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Amides, C8-18 and C18-unsaturated, N,N-bis(hydroxyethyl)	No data available	No data available	No data available
Fatty acids, C8-18 and C18-unsaturated, compounds with diethanolamine	No data available	No data available	No data available
Propan-2-ol	= 1870 mg/kg ( Rat ) Literature data	= 4059 mg/kg ( Rabbit ) Literature data	= 72600 mg/m <sup>3</sup> ( Rat ) 4 h Literature data

Chemical Name	IARC Group 1 or 2	ACGIH - Carcinogens	OSHA listed carcinogens	NTP
Amides, C8-18 and C18-unsaturated, N,N-bis(hydroxyethyl)	No data available	No data available	No data available	No data available
Fatty acids, C8-18 and C18-unsaturated, compounds with diethanolamine	No data available	No data available	No data available	No data available
Propan-2-ol	No data available	A4 Not Classifiable as a Human Carcinogen	No data available	No data available

<b>Sensitization</b>	Not classified.
<b>Mutagenic effects</b>	This product does not contain any known or suspected mutagens.
<b>Carcinogenicity</b>	This product does not contain any known or suspected carcinogens.
<b>Reproductive toxicity</b>	This product does not contain any known or suspected reproductive hazards.
<b>Developmental toxicity</b>	Not known to cause birth defects or have a deleterious effect on a developing fetus.
<b>Routes of Exposure</b>	Skin contact. Inhalation. Eye contact.
<b>Routes of entry</b>	Skin contact. Eye contact.
<b>Specific target organ toxicity - Single exposure</b>	Not classified
<b>Specific target organ toxicity - Repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.

## 12. Ecological Information

**12.1 Toxicity**

**Toxicity to algae**

See component information below.

**Toxicity to fish**

See component information below.

**Toxicity to daphnia and other aquatic invertebrates**

See component information below.

Chemical Name	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Amides, C8-18 and C18-unsaturated, N,N-bis(hydroxyethyl)	No information available	No information available	No information available
Fatty acids, C8-18 and C18-unsaturated, compounds with diethanolamine	No information available	No information available	No information available
Propan-2-ol	> 1400000 µg/L LC50 Lepomis macrochirus 96 h = 11130 mg/L LC50 Pimephales promelas 96 h = 9640 mg/L LC50 Pimephales promelas 96 h	> 1000 mg/L EC50 Desmodesmus subspicatus 96 h > 1000 mg/L EC50 Desmodesmus subspicatus 72 h	= 13299 mg/L EC50 Daphnia magna 48 h

**12.2 Persistence and degradability**

No product level data available.

**12.3 Bioaccumulative potential**

No product level data available.

**12.4 Mobility**

The product is water soluble, and may spread in water systems.

**12.5 Results of PBT and vPvB assessment**

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)  
This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

**12.6 Other adverse effects.**

None known.

**13. Disposal Considerations**

**13.1 Waste treatment methods**

**Disposal Method** Disposal should be made in accordance with federal, state and local regulations.

**Contaminated packaging** Empty containers should be taken for local recycling, recovery or waste disposal.

**14. Transport information**

**14.1. UN number**



UN No. (DOT)	Not regulated
UN No. (MT/ANTT)	Not regulated
UN No. (TDG)	Not regulated
UN/ID No. (ADR/RID/ADN/ADG)	Not regulated
UN No. (IMDG/ANTAQ)	Not regulated
UN No. (ICAO/ANAC)	Not regulated
UN No. (DPC)	Not regulated

**14.2. UN proper shipping name**

The product is not covered by international regulation on the transport of dangerous goods

**14.3 Hazard class(es)**

DOT Hazard class	Not regulated
ANTT Hazard class	Not regulated
TDG Hazard class	Not regulated
ADR/RID/ADN/ADG Hazard class	Not regulated
IMDG/ANTAQ Hazard class	Not regulated
ICAO/ANAC Hazard class/division	Not regulated
DPC Hazard class	Not regulated

**14.4 Packing group**

DOT Packing group	Not regulated
ANTT Packing group	Not regulated
TDG Packing group	Not regulated
ADR/RID/ADN/ADG Packing group	Not regulated
IMDG/ANTAQ Packing group	Not regulated
ICAO/ANAC Packing group	Not regulated
DPC Packing group	Not regulated

**14.5 Environmental hazard**

Marine pollutant	No
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**14.6 Special precautions**

Not applicable

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

Please contact MISDS@slb.com for info regarding transport in Bulk.

**15. Regulatory Information**

**International inventories**

USA (TSCA)	Complies
Canada (DSL)	Complies
Philippines (PICCS)	Does not comply
Japan (ENCS)	Does not comply
China (IECSC)	Complies
Australia (AICS)	Complies
Korean (KECL)	Complies
New Zealand (NZIoC)	Does not comply

**Europe - REACH**

All products supplied from the European Economic Area (EEA) are compliant with the REACH Regulation EC 1907/2006. For products supplied from the EEA, Schlumberger and/or its suppliers have pre-registered and is registering all of the substances that it and/or its suppliers manufactures in or imports into the EEA that are subject to Title II of the REACH Regulation. All products supplied from outside the EEA are subject to REACH only if imported into the EEA. The importer of the products must comply with

REACH for each imported substance. Contact REACH@slb.com for REACH information.

**IMPORTS, Canada**

No import volume restrictions.

**U.S. Federal and State Regulations**

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

Chemical Name	SARA 302 / TPQs	SARA 313	CERCLA RQ
Amides, C8-18 and C18-unsaturated, N,N-bis(hydroxyethyl)	N/A	N/A	N/A
Fatty acids, C8-18 and C18-unsaturated, compounds with diethanolamine	N/A	N/A	N/A
Propan-2-ol	N/A	1.0 %	N/A

**California Proposition 65**

This product does not contain chemical[s] which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**Canadian Classification**

This Safety Data Sheet has been prepared in compliance with the Hazardous Products Regulations.

**16. Other Information**

**Supersedes date** 23/May/2017

**Revision date** 07/Jun/2019

**Version** 14

**This SDS has been revised in the following section(s)** 1, 16

**HMIS classification**

Health 3  
Flammability 1  
Physical hazard 0  
PPE X

N/A - Not Applicable, N/D - Not Determined.

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