

SDS no. PID1402  
Version 9  
Revision date 07/Mar/2018  
Supersedes date 28/Mar/2017



## Safety Data Sheet SAFE-SURF\* O

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

#### 1.1 Product identifier

Product name SAFE-SURF\* O  
Product code PID1402

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

Recommended Use Completion fluid additive.  
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 SDS@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

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1 Subcategory 1B

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

**Physical Hazards**

Flammable Liquids	Category 4
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**2.2 Label elements**



**Signal word**  
DANGER

**Hazard Statements**

- H302 - Harmful if swallowed
- H314 - Causes severe skin burns and eye damage
- H227 - Combustible liquid

**Precautionary statements**

- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- 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
- P403 + P235 - Store in a well-ventilated place. Keep cool
- P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish
  
- P260 - Do not breathe dust/fume/gas/mist/vapors/spray
- P264 - Wash face, hands and any exposed skin thoroughly after handling
- P270 - Do not eat, drink or smoke when using this product
- P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P363 - Wash contaminated clothing before reuse
- P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

**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-%
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## 5. Fire-Fighting Measures

### 5.1 Extinguishing media

**Suitable extinguishing media**

Water Fog, Alcohol Foam, CO<sub>2</sub>, Dry Chemical.

**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**

Combustible liquid. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Heating of containers may cause pressure rise, with risk of bursting.

### 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

Use personal protective equipment. Do not get on skin or clothing. Wash thoroughly after handling. Do not breathe vapors or spray mist. See also section 8.

### 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**

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see Section 13). Take precautionary measures against static discharges. Use non-sparking tools and equipment.

### 6.4 Reference to other sections

See section 13 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. Wear personal protective equipment. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded.

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

- Technical measures/precautions** Ensure adequate ventilation.
- Storage precautions** Keep containers tightly closed in a dry, cool and well-ventilated place. Avoid contact with: Strong oxidizing agents Strong alkalies. Combustible materials Aluminum. Nickel Zinc Copper Copper alloys
- Packaging materials** Use specially constructed containers only. Plastic container Stainless steel

**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)
Alcohols, C6-12, ethoxylated	Not determined	Not determined	Not determined	Not determined	Not determined
1,2-Propylene glycol 1-propyl ether	Not determined	Not determined	Not determined	Not determined	Not determined
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	Not determined	Not determined	Not determined	Not determined	Not determined
Dodecylbenzenesulphonic acid	Not determined	Not determined	Not determined	Not determined	Not determined
2-ethylhexan-1-ol	Not determined	Not determined	Not determined	Not determined	Not determined

**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)
Alcohols, C6-12, ethoxylated 68439-45-2	-
1,2-Propylene glycol 1-propyl ether 1569-01-3	-
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine 68584-24-7	-
Dodecylbenzenesulphonic acid 27176-87-0	-
2-ethylhexan-1-ol 104-76-7	-

**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**

Wear chemical splash goggles and face shield.

**Hand protection**

Impervious gloves made of: Neoprene Nitrile Butyl PVC

Break through time >480 minutes

Glove thickness >=0.4 mm

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>	No information available
<b>Color</b>	Clear
<b>Odor</b>	Slight
<b>Odor threshold</b>	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH	~ 1.0	
pH @ dilution		
Melting / freezing point	No information available	
Boiling point/range	148 °C / 298 °F	
Flash point	67 °C / 152.6 °F	PMCC
Evaporation rate (BuAc =1)	No information available	
Flammability (solid, gas)	Not applicable	
Flammability Limit in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	0.93 - 0.97	
Bulk density	No information available	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
log Pow	No information available	
<b>Explosive properties</b>	Vapours may form explosive mixtures with air	
<b>Oxidizing properties</b>	No information available	

**9.2 Other information**

<b>Pour point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC content(%)</b>	No information available
<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**

Corrosive. Combustible liquid.

**10.2 Chemical stability**

Stable under normal temperature conditions and recommended use.

**10.3 Possibility of Hazardous Reactions**

**Hazardous polymerization**

Not known.

**10.4 Conditions to avoid**

Avoid contact with heat, sparks, open flame, and static discharge. Do not freeze.

**10.5 Incompatible materials**

Strong oxidizing agents. Strong alkalis. Combustible materials. Aluminum. Nickel. Zinc. Copper. Copper alloys.

**10.6 Hazardous decomposition products**

See Section 5.2.

**11. Toxicological Information**

**11.1 Information on toxicological effects**

**Acute toxicity**

**Inhalation**

Vapours are corrosive. After 24-36 hours, injured persons may develop serious shortness of breath and lung oedema. Vapours irritate the respiratory system, and may cause coughing and difficulties in breathing. Vapors may irritate throat and respiratory system.

**Eye contact**

Causes serious eye damage.

**Skin contact**

Causes severe skin burns.

**Ingestion**

Harmful if swallowed. Can burn mouth, throat, and stomach.

**Toxicology data for the components**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Alcohols, C6-12, ethoxylated	1200 mg/kg	2000 mg/kg	No data available
1,2-Propylene glycol 1-propyl ether	= 2504 mg/kg ( Rat ) = 2490 mg/kg ( Rat )	= 3550 mg/kg ( Rabbit )	No data available
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	No data available	No data available	No data available
Dodecylbenzenesulphonic acid	>300-<2000 mg/kg	>2000 mg/kg	No data available
2-ethylhexan-1-ol	= 3730 mg/kg ( Rat )	= 1980 mg/kg ( Rabbit )	> 227 ppm ( Rat ) 6 h > 0.58

			mg/L ( Rat ) 4 h > 0.72 mg/L ( Rat ) 6 h
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Chemical Name	IARC Group 1 or 2	ACGIH - Carcinogens	OSHA listed carcinogens	NTP
Alcohols, C6-12, ethoxylated	No data available	No data available	No data available	No data available
1,2-Propylene glycol 1-propyl ether	No data available	No data available	No data available	No data available
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	No data available	No data available	No data available	No data available
Dodecylbenzenesulphonic acid	No data available	No data available	No data available	No data available
2-ethylhexan-1-ol	No data available	No data available	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>	Inhalation. Skin contact. Eye contact. Ingestion.
<b>Routes of entry</b>	Inhalation.
<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**  
This product is not considered toxic to algae.

**Toxicity to fish**  
This product is not considered toxic to fish.

**Toxicity to daphnia and other aquatic invertebrates**  
This product is not considered toxic to invertebrates.

Chemical Name	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Alcohols, C6-12, ethoxylated	1-10 mg/l	1-10 mg/l	1-10 mg/l
1,2-Propylene glycol 1-propyl ether	No information available	No information available	No information available
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	No information available	No information available	No information available
Dodecylbenzenesulphonic acid	1-10 mg/l	= 29 mg/L EC50 Pseudokirchneriella subcapitata 96 h	1-10 mg/l
2-ethylhexan-1-ol	32 - 37 mg/L LC50 Oncorhynchus mykiss 96 h > 5000 mg/L LC50 Leuciscus idus 48 h 3.6 - 5.1 mg/L	= 8.5 mg/L EC50 Scenedesmus quadricauda 168 h = 2.7 mg/L EC50 Pseudokirchneriella subcapitata 96 h	= 39 mg/L EC50 Daphnia magna 48 h = 320 mg/L EC50 Daphnia magna 48 h = 8.5 mg/L EC50 Daphnia



	LC50 Lepomis macrochirus 96 h 4.78 - 8.85 mg/L LC50 Oncorhynchus mykiss 96 h 0.056 - 7.5 mg/L LC50 Oncorhynchus mykiss 96 h = 28.7 mg/L LC50 Lepomis macrochirus 96 h 27 - 29.5 mg/L LC50 Pimephales promelas 96 h = 29.7 mg/L LC50 Pimephales promelas 96 h 10.0 - 33.0 mg/L LC50 Lepomis macrochirus 96 h > 7.5 mg/L LC50 Oncorhynchus mykiss 96 h	h = 11.5 mg/L EC50 Desmodemus subspicatus 72 h	magna 48 h 4.78 - 8.87 mg/L EC50 Daphnia magna 48 h = 31.8 mg/L EC50 Daphnia magna 48 h
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### 12.2 Persistence and degradability

No product level data available. See component information below.

### 12.3 Bioaccumulative potential

No product level data available. See component information below.

### 12.4 Mobility

Soluble in water.

See component information below.

### 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)	UN3265
UN No. (MT/ANTT)	UN3265
UN No. (TDG)	UN3265
UN/ID No. (ADR/RID/ADN/ADG)	UN3265
UN No. (IMDG/ANTAQ)	UN3265
UN No. (ICAO/ANAC)	UN3265

### 14.2. UN proper shipping name

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Contains Dodecylbenzenesulphonic acid)

Product (RQ): 2,287 (Dodecylbenzenesulfonic acid)  
(add RQ if shipped in containers >RQ for DOT only)

**14.3 Hazard class(es)**

DOT Hazard class	8
ANTT Hazard class	8
TDG Hazard class	8
ADR/RID/ADN/ADG Hazard class	8
IMDG/ANTAQ Hazard class	8
ICAO/ANAC Hazard class/division	8

**14.4 Packing group**

DOT/ANTT Packing group	PG II
ANTT Packing group	PG II
TDG Packing group	PG II
ADR/RID/ADN/ADG Packing group	PG II
IMDG/ANTAQ Packing group	PG II
ICAO/ANAC Packing group	PG II



**14.5 Environmental hazard**

No

**14.6 Special precautions**

Special precautions

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

Please contact SDS@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)	Does not comply
Australia (AICS)	Complies
Korean (KECL)	Does not comply
New Zealand (NZIoC)	Complies

**Europe - REACH**

Contact REACH@slb.com for REACH information.

**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
Alcohols, C6-12, ethoxylated	N/A	N/A	N/A
1,2-Propylene glycol 1-propyl ether	N/A	N/A	N/A
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	N/A	N/A	N/A
Dodecylbenzenesulphonic acid	N/A	N/A	1000 lb final RQ 454 kg final RQ
2-ethylhexan-1-ol	N/A	N/A	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** 28/Mar/2017

**Revision date** 07/Mar/2018

**Version** 9

**This SDS has been revised in the following section(s)** All sections. Updated according to WHMIS 2015. Globally Harmonized System (GHS)

### **HMIS classification**

Health	2
Flammability	2
Physical hazard	0
PPE	X

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