

## Safety Data Sheet SAFE-SURF\* EU

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Product name SAFE-SURF\* EU  
Product code PID20170

#### 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**  
Schlumberger Oilfield UK PLC  
Schlumberger House, Buckingham Gate  
Gatwick Airport  
West Sussex RH6 0NZ

+47 51577424

SDS@slb.com

#### 1.4 Emergency Telephone Number

**Emergency telephone** (24 Hour) Australia +61 2801 44558, Asia Pacific +65 3158 1074, China +86 10 5100 3039, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, New Zealand +64 9929 1483, USA 001 281 561 1600

#### National Poison Center Numbers

<b>Netherlands</b>	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)
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### 2. Hazards Identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

#### Health hazards

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

**Environmental hazards** Not classified

**Physical Hazards** Not classified

## 2.2 Label elements



#### Signal word

DANGER

#### Hazard Statements

H302 - Harmful if swallowed  
H312 - Harmful in contact with skin  
H315 - Causes skin irritation  
H318 - Causes serious eye damage  
H332 - Harmful if inhaled

#### Precautionary Statements

P280 - Wear protective gloves, protective clothing, eye protection  
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

#### Supplementary precautionary statements

P261 - Avoid breathing 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  
P271 - Use only outdoors or in a well-ventilated area  
P310 - Immediately call a POISON CENTER or physician  
P330 - Rinse mouth  
P332 + P313 - If skin irritation occurs: Get medical attention  
P362 + P364 - Take off contaminated clothing and wash it before reuse

#### Contains

2-butoxyethanol

D-Glucopyranose, oligomeric, C8-10 glycosides

## 2.3 Other hazards

Not classified as PBT/vPvB by current EU criteria

Thermal decomposition can lead to release of irritating and toxic gases and vapors

### 3. Composition/information on Ingredients

#### 3.1 Substances

Not applicable

#### 3.2 Mixtures

Chemical Name	EC No	CAS No	Weight-%	Component information	REACH registration number
2-butoxyethanol	203-905-0	111-76-2	30-60	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	EU: 01-2119475108-3 6-xxxx
D-Glucopyranose, oligomeric, C8-10 glycosides	500-220-1	68515-73-1	5-10	Eye Dam.1 (H318)	EU: 01-2119488530-3 6-xxxx

#### Comments

The product contains other ingredients which do not contribute to the overall classification.

### 4. First Aid Measures

#### 4.1 First aid measures

<b>Inhalation</b>	Move to fresh air. Keep at rest. If breathing is difficult, (trained personnel should) give oxygen. Seek immediate medical attention/advice.
<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. Seek medical attention if irritation occurs.
<b>Eye Contact</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Seek medical attention at once.

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

<b>General advice</b>	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.
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#### 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.

**Eye contact** 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**

Fire or high temperatures create: Carbon oxides (COx).

**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. 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**

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.

## 7. Handling and Storage

### 7.1 Precautions for safe handling

#### Handling

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

#### Hygiene Measures

Use good work and personal hygiene practices to avoid exposure. When using do not smoke, eat or drink. Wash hands and face before breaks and immediately after handling the product. Remove contaminated clothing.

### 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.

**Storage class** Chemical storage.

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

### 7.3 Specific end uses

See Section 1.2.

## 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

**Exposure limits** No biological limit allocated

#### Component Information

Chemical Name	EU OEL	Austria	Denmark
2-butoxyethanol	50 ppm STEL 246 mg/m <sup>3</sup> STEL 20 ppm TWA 98 mg/m <sup>3</sup> TWA Possibility of significant uptake through the skin*1)	40 ppm STEL 200 mg/m <sup>3</sup> STEL 20 ppm TWA 98 mg/m <sup>3</sup> TWA	20 ppm 98 mg/m <sup>3</sup>
D-Glucopyranose, oligomeric, C8-10 glycosides	Not determined	Not determined	Not determined
Chemical Name	France	Germany	Hungary
2-butoxyethanol	50ppmSTEL 246mg/m <sup>3</sup> STEL 10 ppmTWA 49 mg/m <sup>3</sup> TWA	10 ppm TWA 49 mg/m <sup>3</sup> TWA	98mg/m <sup>3</sup> TWA 246mg/m <sup>3</sup> STEL
D-Glucopyranose, oligomeric, C8-10 glycosides	Not determined	Not determined	Not determined
Chemical Name	Italy	Netherlands	Norway
2-butoxyethanol	Not determined	100 mg/m <sup>3</sup> TWA	10 ppm TWA 50 mg/m <sup>3</sup> TWA 15 ppm STEL 75 mg/m <sup>3</sup> STEL Skin
D-Glucopyranose, oligomeric, C8-10 glycosides	Not determined	Not determined	Not determined

Chemical Name	Poland	Portugal	Romania
2-butoxyethanol	200 mg/m <sup>3</sup> STEL NDSh 98 mg/m <sup>3</sup> TWA NDS	Skin 50 ppm STEL VLE-CD 246 mg/m <sup>3</sup> STEL VLE-CD 20 ppm TWA indicative limit value 98 mg/m <sup>3</sup> TWA indicative limit value	50ppmSTEL 246mg/m <sup>3</sup> STEL 20ppmTWA 98mg/m <sup>3</sup> TWA
D-Glucopyranose, oligomeric, C8-10 glycosides	Not determined	Not determined	Not determined
Chemical Name	Spain	Switzerland	UK
2-butoxyethanol	50 ppm STEL 245 mg/m <sup>3</sup> STEL Skin*2) 20 ppm TWA VLA-ED 98 mg/m <sup>3</sup> TWA VLA-ED	20 ppm STEL 98 mg/m <sup>3</sup> STEL Skin*2) 10 ppm TWA MAK 49 mg/m <sup>3</sup> TWA MAK	50 ppm STEL 246 mg/m <sup>3</sup> STEL Skin*2) 25 ppm TWA 123 mg/m <sup>3</sup> TWA
D-Glucopyranose, oligomeric, C8-10 glycosides	Not determined	Not determined	Not determined

## Europe - REACH

### Derived No Effect Level (DNEL)

#### Short term exposure local effects

##### 2-butoxyethanol

Inhalation 246 mg/m<sup>3</sup>

#### Short term exposure systemic effects

##### 2-butoxyethanol

Dermal 89 mg/kg

Inhalation 1091 mg/m<sup>3</sup>

#### Long term exposure systemic effects

##### 2-butoxyethanol

Dermal 125 mg/kg

Inhalation 98 mg/m<sup>3</sup>

##### D-Glucopyranose, oligomeric, C8-10 glycosides

Dermal 595000 mg/kg

Inhalation 420 mg/m<sup>3</sup>

#### Predicted No Effect Concentration (PNEC)

##### 2-butoxyethanol

Fresh Water 8.8 mg/l

Sea Water 0.88 mg/l

Freshwater sediment 34.6 mg/kg

Sea sediment 3.46 mg/kg

Soil 2.33 mg/kg

Impact on sewage treatment 463 mg/l

Intermittent release 26.4 mg/l

##### D-Glucopyranose, oligomeric, C8-10 glycosides

Fresh Water 0.176 mg/L

Sea Water 0.018 mg/L

Freshwater sediment 1.516 mg/kg

Sea sediment 0.152 mg/kg

Soil 0.654 mg/kg

Impact on sewage treatment 560 mg/L

Intermittent release 0.27 mg/L

## 8.2 Exposure controls

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. Mechanical ventilation or local exhaust ventilation is required.

## Personal protective equipment

<b>Eye protection</b>	Use eye protection according to EN 166, designed to protect against liquid splashes. Tightly fitting safety goggles. Safety glasses with side-shields.
<b>Hand protection</b>	Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training Impervious gloves made of: Neoprene Nitrile Butyl Break through time >480 minutes Glove thickness >=0.4 mm Be aware that liquid may penetrate the gloves. Frequent change is advisable.
<b>Respiratory protection</b>	No personal respiratory protective equipment normally required, In case of insufficient ventilation wear suitable respiratory equipment, Respirator with a vapor filter (EN 141), Use respirator with organic vapor protection (A, brown), At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used.
<b>Skin and body protection</b>	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.



## 8.2.3 Environmental exposure controls

<b>Environmental exposure</b>	Use appropriate containment to avoid environmental contamination See section 6 for more information
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# 9. Physical and Chemical Properties

## 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear
<b>Odor</b>	Sweet
<b>Color</b>	Colorless - Light orange
<b>Odor threshold</b>	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH	3.2	
pH @ dilution	No information available	
Melting point	No information available	
Boiling point/range	No information available	
Flash point	No information available	
Evaporation rate (BuAc =1)	No information available	
Flammability (solid, gas)	Not applicable	
Flammability Limit in Air		
Upper flammability limit	Not applicable	
Lower flammability limit	Not applicable	
Vapor pressure	~ 16 mmHg	@ 20 °C
Vapor density	No information available	
Specific gravity	No information available	
Bulk density	No information available	
Relative density	0.99 s.g	@ 20°C.
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Autoignition temperature	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>	No information available

<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**

Not known.

### **10.4 Conditions to avoid**

None known.

### **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**

#### **Acute toxicity**

<b>Inhalation</b>	Harmful by inhalation. Inhalation of vapors in high concentration may cause shortness of breath (lung edema).
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<b>Eye contact</b>	Causes serious eye damage.
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<b>Skin contact</b>	Causes skin irritation. Components of the product may be absorbed into the body through the skin.
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<b>Ingestion</b>	Harmful if swallowed.
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**Unknown acute toxicity** Not applicable.

#### Toxicology data for the components

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-butoxyethanol	1200 mg/kg (Guinea pigs)	> 2000 mg/kg (Rat)	400 ppm (Rabbit)
D-Glucopyranose, oligomeric, C8-10 glycosides	> 2000 mg/kg bw (Rat) ECHA Data	> 2000 mg/kg (Rabbit) ECHA Data	No data available

**Sensitization** This product does not contain any components suspected to be sensitizing.

**Mutagenic effects** This product does not contain any known or suspected mutagens.

**Carcinogenicity** This product does not contain any known or suspected carcinogens.

**Reproductive toxicity** This product does not contain any known or suspected reproductive hazards.

**Routes of Exposure** Inhalation. Eye contact. Skin contact. Ingestion.

**Routes of entry** Inhalation. Eye contact. Skin contact. Ingestion.

**Specific target organ toxicity - Single exposure** Not classified

**Specific target organ toxicity - Repeated exposure** Not classified.

**Aspiration hazard** Not applicable.

**Other information** Key literature references and sources for data. See Section 16 for more information.

## 12. Ecological Information

### 12.1 Toxicity

The product component(s) are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.  
The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

#### 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.

#### Toxicology data for the components

Chemical Name	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
2-butoxyethanol	= 2950 mg/L LC50 Lepomis macrochirus 96 h = 1490 mg/L LC50 Lepomis macrochirus 96 h	No information available	= 1698 - 1940 mg/L (LC50; Daphnia magna) = 1720 mg/L (EC50; water flea)

D-Glucopyranose, oligomeric, C8-10 glycosides	170 mg/l LC50 Zebra fish	37 mg/L (= 21 mg a.i./L) EC50 to the freshwater algae <i>Scenedesmus subspicatus</i> 72h	> 100 mg/l EC50 <i>Daphnia magna</i> 48h
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## **12.2 Persistence and degradability**

Readily biodegradable. See component information below.

Chemical Name	Persistence and degradability
2-butoxyethanol	Readily biodegradable
D-Glucopyranose, oligomeric, C8-10 glycosides	OECD 301 Readily biodegradable

## **12.3 Bioaccumulative potential**

The product does not contain any substances expected to be bioaccumulating. See component information below.

Chemical Name	Bioaccumulation
2-butoxyethanol	Not likely to bioaccumulate
D-Glucopyranose, oligomeric, C8-10 glycosides	Not likely to bioaccumulate

## **12.4 Mobility**

### **Mobility**

Soluble in water. See component information below.

Chemical Name	Mobility
2-butoxyethanol	Soluble in water
D-Glucopyranose, oligomeric, C8-10 glycosides	Partially soluble

### **Mobility in soil**

See component information below.

Chemical Name	Mobility in soil
2-butoxyethanol	No information available
D-Glucopyranose, oligomeric, C8-10 glycosides	No information available

## **12.5 Results of PBT and vPvB assessment**

Not classified as PBT/vPvB by current EU criteria.

## **12.6 Other adverse effects.**

None known.

## **12.7 Other information**

Key literature references and sources for data. See Section 16 for more information.

## 13. Disposal Considerations

### 13.1 Waste treatment methods

<b>Waste from residues/unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>EWC Waste Disposal No</b>	According to the European Waste Catalog, Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used The following Waste Codes are only suggestions: EWC waste disposal No: 07 01 04 Waste Code: 7152 Organic waste without halogen.

## 14. Transport information

### 14.1. UN number

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)

<b>ADR/RID/ADN/ADG Hazard class</b>	Not regulated
<b>IMDG/ANTAQ Hazard class</b>	Not regulated
<b>ICAO/ANAC Hazard class/division</b>	Not regulated

### 14.4 Packing group

<b>ADR/RID/ADN/ADG Packing group</b>	Not regulated
<b>IMDG/ANTAQ Packing group</b>	Not regulated
<b>ICAO/ANAC Packing group</b>	Not regulated

### 14.5 Environmental hazard

No

### 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 SDS@slb.com for info regarding transport in Bulk.

## 15. Regulatory Information

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

This safety data sheet complies with the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008  
Commission Regulation (EU) No 2015/830 of 28 May 2015  
Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

#### Dangerous substance category per Seveso Directive (2012/18/EU)

This product does not contain substances listed under Dangerous substance category per Seveso Directive (2012/18/EU)

#### Netherlands

Dutch Mining Regulations: In accordance with Mining Regulations 9.2 and Chapter 4 of the Working Conditions Decree.

#### International inventories

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

#### 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.

### 15.2 Chemical Safety Report

No information available

## 16. Other Information

Prepared by	Global Regulatory Compliance - Chemicals (GRC - Chemicals) , Anne Karin (Anka) Fosse
Supersedes Date:	08/Jul/2016
Revision date	09/Aug/2018
Version	2
This SDS has been revised in the following section(s)	1, 2, 3, 8, 11, 12, 15, 16 Product Code change No changes with regard to classification have been made.

**Key literature references and sources for data**

www.ChemADVISOR.com  
Supplier  
National Chemical Inventories  
National regulatory information  
National occupational exposure limits

**Training Advice**

Do not handle until all safety precautions have been read and understood  
Follow general hygiene considerations recognized as common good workplace practices

**Full text of H-Statements referred to under sections 2 and 3**

H302 - Harmful if swallowed  
H312 - Harmful in contact with skin  
H315 - Causes skin irritation  
H318 - Causes serious eye damage  
H332 - Harmful if inhaled  
H319 - Causes serious eye irritation

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