

## Safety Data Sheet EZEFL0\* Surfactant B197

### 1. Identification of the substance/preparation and of the Company/undertaking

#### 1.1 Product identifier

**Product name** EZEFL0\* Surfactant B197  
**Product code** B197  
**Country Limitations** For use only in North Sea countries (NSG)  
**Norway Pr. no.** 54338  
**Denmark Pr. no.** 1685495

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

**Recommended use** Used as a fracturing additive in oilfield applications

**Uses advised against** Consumer use

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

**Supplier identification**  
Schlumberger Oilfield UK PLC  
Victory House, Churchill Court  
Manor Royal, Crawley  
West Sussex RH10 9LU  
+ 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 001 281 595 3518

<b>Denmark</b>	Poison Control Hotline (DK): +45 82 12 12 12 +31 (0)30-2748888 Only for the purpose of informing medical personnel in cases of acute intoxications
<b>Netherlands</b>	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)
<b>Norway</b>	Poison information centre: +47 22 59 13 00

### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

**Regulation (EC) No. 1272/2008**

##### Health hazards

Acute oral toxicity	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

##### Environmental hazards

Chronic aquatic toxicity	Category 3
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**Physical Hazards**

Flammable Liquids	Category 3
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**2.2 Label Elements**



**Signal word**  
DANGER

**Hazard statements**

H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H318 - Causes serious eye damage  
H336 - May cause drowsiness or dizziness  
H412 - Harmful to aquatic life with long lasting effects  
H226 - Flammable liquid and vapor

**Precautionary Statements - EU (§28, 1272/2008)**

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
P273 - Avoid release to the environment  
P280 - Wear protective gloves/ protective clothing/ 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  
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell

**Supplementary precautionary statements**

P233 - Keep container tightly closed  
P240 - Ground/bond container and receiving equipment  
P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment  
P242 - Use only non-sparking tools  
P243 - Take precautionary measures against static discharge  
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapours/ 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  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower  
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P330 - Rinse mouth  
P332 + P313 - If skin irritation occurs: Get medical advice/ attention  
P362 - Take off contaminated clothing and wash before re-use  
P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P501 - Dispose of contents/ container to an approved waste disposal plant

## Contains

Propan-2-ol

Ethoxylated C11 linear/branched alcohols (7eo)

2-butoxyethanol

Alcohols, C12-15 linear, ethoxylated

## 2.3 Other data

Not classified as PBT/vPvB by current EU criteria

# 3. Composition/information on ingredients

## 3.1 Substances

Not Applicable

## 3.2 Mixtures

Component	EC-No.	CAS-No	Weight % - range	Classification (67/548)	Classification (Reg. 1272/2008)	REACH registration number
Propan-2-ol	200-661-7	67-63-0	10 - 30	F;R11 R67 Xi;R36	Flam. Liq. 2, (H225) STOT SE 3 (H336) Eye Irrit. 2 (H319)	No data available
Ethoxylated C11 linear/branched alcohols (7eo)	Polymer	34398-01-1b	10 - 30	Xn;R22 Xi;R41	Acute toxicity (Oral) Cat.4 (H302) Eye Dam. 1 (H318) Skin Irritation Cat. 2 (H315) Aquatic Chronic Cat. 2 (H411)	No data available
2-butoxyethanol	203-905-0	111-76-2	10 - 25	Xn; R20/21/22 Xi; R36/38	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	01-2119475108-36-x xxx
Alcohols, C12-15 linear, ethoxylated	500-195-7	68131-39-5	5-10	Xn;R22 Xi;R41	Eye Dam. 1 (H318) Acute Tox. 4 (H302)	No data available

## Comments

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

## 4. First aid measures

### 4.1 First Aid

<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. Get medical attention.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water 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. Continue to rinse for at least 15 minutes. Get immediate medical attention.

### 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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#### **Main 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

<b>Notes to physician</b>	Treat symptomatically.
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## 5. Fire-fighting measures

### 5.1 Extinguishing media

#### **Suitable extinguishing media**

Use extinguishing media appropriate for surrounding material.

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

None known.

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

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

FLAMMABLE. Vapors are heavier than air and may spread along floors. Vapors may travel considerable distance to source of ignition and flash back.

#### **Hazardous combustion products**

Fire or high temperatures create: Carbon oxides (COx), Harmful organic chemical fumes.

### **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 personnel to safe areas. Remove all sources of ignition. 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 materials 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**

Take precautionary measures against static discharges. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Use clean non-sparking tools to collect absorbed material. Ground and bond containers when transferring material. 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. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Ensure all equipment is electrically grounded before beginning transfer operations.

<b>Storage precautions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition Store away from incompatibles, Incompatible with oxidising agents.
<b>Storage class</b>	Flammable liquid storage.
<b>Packaging material</b>	Use specially constructed containers only

### 7.3 Specific end uses

See Section 1.2.

## 8. Exposure controls/personal protection

### 8.1 Control parameters

Component	EU OEL - Third List	Austria	Australia	Denmark
Propan-2-ol	Not determined	800 ppm STEL 2000 mg/m <sup>3</sup> STEL 200 ppm TWA 500 mg/m <sup>3</sup> TWA	500ppmSTEL 1230mg/m <sup>3</sup> STEL 400ppmTWA 983mg/m <sup>3</sup> TWA	200 ppm 490 mg/m <sup>3</sup>
Ethoxylated C11 linear/branched alcohols (7eo)	Not determined	Not determined	Not determined	Not determined
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	40 ppm STEL 200 mg/m <sup>3</sup> STEL 20 ppm TWA 98 mg/m <sup>3</sup> TWA	50ppmSTEL 242mg/m <sup>3</sup> STEL 20ppmTWA 96.9mg/m <sup>3</sup> TWA skin notation	20 ppm 98 mg/m <sup>3</sup>
Alcohols, C12-15 linear, ethoxylated	Not determined	Not determined	Not determined	Not determined

Component	Malaysia	France	Germany	Hungary
Propan-2-ol	400 ppm TWA 983 mg/m <sup>3</sup> TWA	400ppmSTEL 980mg/m <sup>3</sup> STEL	200 ppm TWA 500 mg/m <sup>3</sup> TWA	500mg/m <sup>3</sup> TWA 2000mg/m <sup>3</sup> STEL
Ethoxylated C11 linear/branched alcohols (7eo)	Not determined	Not determined	Not determined	Not determined
2-butoxyethanol	20 ppm TWA 96.7 mg/m <sup>3</sup> TWA Skin notation	50ppmSTEL 246mg/m <sup>3</sup> STEL 10 ppmTWA 49 mg/m <sup>3</sup> TWA	10 ppm MAK 49 mg/m <sup>3</sup> MAK	98mg/m <sup>3</sup> TWA 246mg/m <sup>3</sup> STEL
Alcohols, C12-15 linear, ethoxylated	Not determined	Not determined	Not determined	Not determined

Component	New Zealand	Italy	Netherlands	Norway
Propan-2-ol	500 ppm STEL 1230 mg/m <sup>3</sup> STEL 400 ppm TWA 983 mg/m <sup>3</sup> TWA	Not determined	Not determined	100 ppm TWA 245 mg/m <sup>3</sup> TWA 150 ppm STEL 306.25 mg/m <sup>3</sup> STEL
Ethoxylated C11 linear/branched alcohols (7eo)	Not Determined	Not determined	Not determined	Not determined

2-butoxyethanol	25 ppm TWA 121 mg/m <sup>3</sup> TWA Possibility of significant uptake through the skin	Not determined	100 mg/m <sup>3</sup> GW	10 ppm TWA 50 mg/m <sup>3</sup> TWA 20 ppm STEL 75 mg/m <sup>3</sup> STEL Skin
Alcohols, C12-15 linear, ethoxylated	Not Determined	Not determined	Not determined	Not determined

Component	Poland	Portugal	Romania	Russia
Propan-2-ol	1200 mg/m <sup>3</sup> STEL NDSch 900 mg/m <sup>3</sup> TWA NDS	400 ppm STEL VLE-CD 200 ppm TWA	203ppmSTEL 500mg/m <sup>3</sup> STEL 81ppmTWA 200mg/m <sup>3</sup> TWA	50 mg/m <sup>3</sup> STEL vapor 10 mg/m <sup>3</sup> TWA vapor
Ethoxylated C11 linear/branched alcohols (7eo)	Not determined	Not determined	Not determined	Not determined
2-butoxyethanol	200 mg/m <sup>3</sup> STEL Skin 98 mg/m <sup>3</sup> TWA	20 ppm TWA	50ppmSTEL 250mg/m <sup>3</sup> STEL 246mg/m <sup>3</sup> STEL 30ppmTWA 150mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> MAC
Alcohols, C12-15 linear, ethoxylated	Not determined	Not determined	Not determined	Not determined

Component	Spain	Switzerland	Turkey	UK
Propan-2-ol	400 ppm STEL 1000 mg/m <sup>3</sup> STEL 200 ppm TWA VLA-ED 500 mg/m <sup>3</sup> TWA VLA-ED	400 ppm STEL 1000 mg/m <sup>3</sup> STEL 200 ppm TWA MAK 500 mg/m <sup>3</sup> TWA MAK	Not determined	500 ppm STEL 1250 mg/m <sup>3</sup> STEL 400 ppm TWA 999 mg/m <sup>3</sup> TWA
Ethoxylated C11 linear/branched alcohols (7eo)	Not determined	Not determined	Not determined	Not determined
2-butoxyethanol	50 ppm VLA-EC 245 mg/m <sup>3</sup> VLA-EC Skin 20 ppm VLA-ED indicative limit value 98 mg/m <sup>3</sup> VLA-ED indicative limit value	20 ppm STEL 98 mg/m <sup>3</sup> STEL Skin 10 ppm MAK 49 mg/m <sup>3</sup> MAK	50 ppm STEL 246 mg/m <sup>3</sup> STEL Skin 20 ppm TWA 98 mg/m <sup>3</sup> TWA	50 ppm STEL 246 mg/m <sup>3</sup> STEL Skin 25 ppm TWA 123 mg/m <sup>3</sup> TWA
Alcohols, C12-15 linear, ethoxylated	Not determined	Not determined	Not determined	Not determined

#### 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>

##### Predicted No Effect Concentration (PNEC)

###### 2-butoxyethanol

Fresh Water	8.8 mg/l
Sea Water	0.88 mg/l
Fresh water 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	9.1 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 measures to reduce exposure

Ensure adequate ventilation. Keep airborne concentrations below exposure limits. Mechanical ventilation or local exhaust ventilation is required.

### Personal protective equipment

<b>Eye protection</b>	Safety glasses with side-shields.
<b>Hand protection</b>	Use protective gloves made of:., Butyl, 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, 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.



## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Aqueous solution
<b>Odour</b>	Alcohol
<b>Colour</b>	Clear Colourless
<b>Odor threshold</b>	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH	No information available	
pH @ dilution	5	@ 10g/l
Melting/freezing point	-40 °C / -40 °F	

<b>Boiling point/range</b>	88 °C / 190 °F	
<b>Flash Point</b>	32 °C / 89 °F	Pensky-Martens CC
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	Not Applicable	
<b>Flammability Limits in Air</b>		
<b>Upper flammability Limit</b>	Not applicable	
<b>Lower flammability limit</b>	Not applicable	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific gravity</b>	No information available	
<b>Bulk density</b>	No information available	
<b>Relative density</b>	~0.9	@ 25 °C.
<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>Viscosity, dynamic</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 VALUE</b>	No information available

## **10. Stability and reactivity**

### **10.1 Reactivity**

FLAMMABLE LIQUID AND vapour.

### **10.2 Chemical stability**

Stable under normal temperature conditions and recommended use.

### **10.3 Possibility of Hazardous Reactions**

#### **Hazardous polymerization**

Hazardous polymerisation does not occur.

### **10.4 Conditions to avoid**

Avoid heat, flames and other sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.

### **10.5 Incompatible materials**

Incompatible with oxidising agents.

### **10.6 Hazardous decomposition products**

See Section 5.2.

## 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

<b>Inhalation</b>	May cause drowsiness and dizziness based on components.
<b>Eye contact</b>	Causes serious eye damage.
<b>Skin contact</b>	Causes skin irritation. Components of the product may be absorbed into the body through the skin.
<b>Ingestion</b>	Harmful if swallowed.
<b>Unknown acute toxicity</b>	Not Applicable.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Propan-2-ol	= 1870 mg/kg ( Rat )	= 4059 mg/kg ( Rabbit )	= 72600 mg/m <sup>3</sup> ( Rat ) 4 h
Ethoxylated C11 linear/branched alcohols (7eo)	No data available	No data available	No data available
2-butoxyethanol	= 470 mg/kg ( Rat )	= 99 mg/kg ( Rabbit )	= 450 ppm ( Rat ) 4 h
Alcohols, C12-15 linear, ethoxylated	= 2 g/kg ( Rat ) = 1600 mg/kg ( Rat )	= 2500 mg/kg ( Rabbit )	No data available

<b>Sensitisation</b>	This product does not contain any components suspected to be sensitizing.
<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>Routes of exposure</b>	Skin contact. Eye contact. Inhalation. Ingestion.
<b>Routes of entry</b>	Skin contact. Eye contact. 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 Applicable.

## 12. Ecological information

## **12.1 Toxicity**

Harmful to aquatic life with long lasting effects

### **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.

Component	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Propan-2-ol	> 1400000 µg/L LC50 <i>Lepomis macrochirus</i> 96 h = 11130 mg/L LC50 <i>Pimephales promelas</i> 96 h = 9640 mg/L LC50 <i>Pimephales promelas</i> 96 h	> 1000 mg/L EC50 <i>Desmodesmus subspicatus</i> 72 h > 1000 mg/L EC50 <i>Desmodesmus subspicatus</i> 96 h	= 13299 mg/L EC50 <i>Daphnia magna</i> 48 h
Ethoxylated C11 linear/branched alcohols (7eo)	No information available	No information available	No information available
2-butoxyethanol	= 2950 mg/L LC50 <i>Lepomis macrochirus</i> 96 h = 1490 mg/L LC50 <i>Lepomis macrochirus</i> 96 h	No information available	= 1698 - 1940 mg/L (LC50; <i>Daphnia magna</i> ) = 1720 mg/L (EC50; water flea)
Alcohols, C12-15 linear, ethoxylated	No information available	No information available	No information available

## **12.2 Persistence and degradability**

No product level data available.

## **12.3 Bioaccumulative potential**

No data available.

## **12.4 Mobility in soil**

### **Mobility**

Soluble in water.

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

Not classified as PBT/vPvB by current EU criteria.

## **12.6 Other adverse effects.**

None known.

## 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 transported/delivered using a registered waste carrier for local recycling or waste disposal.
<b>EWC waste disposal No.</b>	According to the European Waste Catalogue, 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: 16 05 08 - discarded organic chemicals consisting of or containing dangerous substances. Waste Code: 7152 Organic waste without halogen.

## 14. Transport information

### 14.1 UN number

<b>UN/ID No. (ADR/RID/ADN/ADG)</b>	UN1993
<b>UN No. (IMDG)</b>	UN1993
<b>UN No. (ICAO)</b>	UN1993

### 14.2 Proper shipping name

FLAMMABLE LIQUID, N.O.S. (propan-2-ol)

### 14.3. Hazard class(es)

<b>ADR/RID/ADN/ADG Hazard class</b>	3
<b>IMDG Hazard class</b>	3
<b>ICAO Hazard class/division</b>	3

### 14.4 Packing group

<b>ADR/RID/ADN/ADG Packing Group</b>	III
<b>IMDG Packing group</b>	III
<b>ICAO Packing group</b>	III

### 14.5 Environmental hazard

No

### 14.6 Special precautions

<b>Hazard ID</b>	30
<b>EmS (IMDG)</b>	F-E, S-E
<b>Emergency action code</b>	3Y
<b>Tunnel restriction code</b>	(D/E)

**14.7 Transport in bulk according to Annex 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**

Australian Standard for the Uniform Scheduling of Drugs and Poisons

2-butoxyethanol  
Schedule 6

Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

This safety data sheet complies with the requirements of Regulation (EC) No. 1272/2008.

**International inventories**

USA, Toxic Substances Control Act inventory (TSCA)	Complies
European Union - EINECS and ELINCS	Complies
Canada, Domestic Substance List (DSL)	Complies
Philippines (PICCS)	Does not Comply
Inventory - Japan - Existing and New Chemicals list	Does not Comply
China (IECSC)	Does not Comply
Australia (AICS)	Does not Comply
Korea (KECL)	Complies
Inventory - New Zealand - Inventory of Chemicals (NZIoC)	Does not Comply

**15.2 Chemical Safety Report**

No information available

## 16. Other information

Prepared by	Global Regulatory Compliance - Chemicals (GRC - Chemicals) , Muriel Martin Beurel
Supersedes date	29/Mar/2012
Revision date	30/Nov/2015
Version	6
The following sections have been revised:	Updated according to GHS/CLP, This SDS have been made in a new database and therefore a new layout. No changes with regard to classification have been made.

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**Text of R phrases mentioned in Section 3**

R11 - Highly flammable  
R22 - Harmful if swallowed  
R36 - Irritating to eyes  
R41 - Risk of serious damage to eyes  
R67 - Vapors may cause drowsiness and dizziness

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed  
R36/38 - Irritating to eyes and skin

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

H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H318 - Causes serious eye damage  
H336 - May cause drowsiness or dizziness  
H412 - Harmful to aquatic life with long lasting effects  
H225 - Highly flammable liquid and vapor  
H226 - Flammable liquid and vapor  
H312 - Harmful in contact with skin  
H319 - Causes serious eye irritation  
H332 - Harmful if inhaled  
H411 - Toxic to aquatic life with long lasting effects

**Disclaimer**

The information contained herein is considered in good faith as reliable of the date issued and is based upon on measurements, tests or data derived from supplier's own study or furnished by others. In providing this SDS information, Supplier makes no express or implied warranties as to the information or product; merchantability or fitness of purpose; any express or implied warranty; or non-infringement of intellectual property rights; and supplier assumes no responsibility for any direct, special or consequential damages, results obtained, or the activities of others. To the maximum extent permitted by law, supplier's warranty obligations and buyer's sole remedies are as stated in separate agreement between the parties.