



## Safety Data Sheet DEEPCLEAN\*

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

#### 1.1 Product identifier

**Product name** DEEPCLEAN\*  
**Product code** PID16970  
**Country Limitations** This SDS is not for use in EU/EEA.

#### 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 Drilling Fluids UK Limited  
Westhill Business Park  
Westhill AB32 6JL Aberdeenshire  
Scotland United Kingdom

+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

### 2. Hazards Identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification

##### Health hazards

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

**Environmental hazards** Not classified

Physical Hazards

Not classified

## 2.2 Label elements



### Signal word

DANGER

### Hazard Statements

H302 - Harmful if swallowed  
H304 - May be fatal if swallowed and enters airways  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage  
H332 - Harmful if inhaled

### Precautionary statements

P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P331 - Do NOT induce vomiting

### 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  
P272 - Contaminated work clothing should not be allowed out of the workplace  
P330 - Rinse mouth  
P332 + P313 - If skin irritation occurs: Get medical advice/attention  
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention  
P337 + P313 - If eye irritation persists: Get medical advice/attention  
P362 + P364 - Take off contaminated clothing and wash it before reuse  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

### Contains

D-Glucopyranose, oligomeric, C8-10 glycosides

2-butoxyethanol

Citrus Extract

Distillates, petroleum, hydrotreated light

## 2.3 Other hazards

Not classified as PBT/vPvB by current EU criteria

### Australian statement of hazardous/dangerous nature

Classified as Hazardous according to the criteria of NOHSC.

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

### 3. Composition/information on Ingredients

#### 3.1 Substances

Not applicable

#### 3.2 Mixtures

Chemical Name	EC No	CAS No	Weight-%
D-Glucopyranose, oligomeric, C8-10 glycosides	500-220-1	68515-73-1	30-60
2-butoxyethanol	203-905-0	111-76-2	10-30
Citrus Extract	Not applicable	68647-72-3	10-30
Distillates, petroleum, hydrotreated light	265-149-8	64742-47-8	10-30

#### Comments

Citrus extract can use either CAS# 8028-48-6 or 68647-72-3.

### 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>	Do not induce vomiting without medical advice. If vomiting occurs spontaneously, minimize the risk of aspiration by properly positioning the affected person. 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 immediately if symptoms occur.
<b>Eye Contact</b>	Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if any discomfort continues.

#### 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

## **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 before eating, drinking or smoking 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 Avoid contact with: Heat, flames and sparks Strong oxidizing agents Strong acids Strong alkalies. Strong reducing agents

**Storage class** Chemical storage.

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

**8. Exposure Controls/Personal Protection**

**8.1 Control parameters**

**Exposure limits** OEL for "Normal and branched chain alkanes, > C7: 1200 mg/m<sup>3</sup>  
No biological limit allocated

**Component Information**

Chemical Name	Arabic	Australia	Egypt
D-Glucopyranose, oligomeric, C8-10 glycosides	Not determined	Not determined	Not determined
2-butoxyethanol	25 ppm TWA 121 mg/m <sup>3</sup> TWA	50ppmSTEL 242mg/m <sup>3</sup> STEL 20ppmTWA 96.9mg/m <sup>3</sup> TWA	Not determined
Citrus Extract	Not determined	Not determined	Not determined
Distillates, petroleum, hydrotreated light	Not determined	Not determined	Not determined
Chemical Name	India	Indonesian	Japan
D-Glucopyranose, oligomeric, C8-10 glycosides	Not determined	Not determined	Not determined
2-butoxyethanol	Not determined	25 ppm TWA 121 mg/m <sup>3</sup> TWA Skin notation	20 ppm Ceiling 97 mg/m <sup>3</sup> Ceiling 25 ppm ACL
Citrus Extract	Not determined	Not determined	Not determined
Distillates, petroleum, hydrotreated light	Not determined	Not determined	Not determined
Chemical Name	Kazakhstan	Kuwait	New Zealand
D-Glucopyranose, oligomeric, C8-10 glycosides	Not determined	Not determined	Not determined
2-butoxyethanol	5 mg/m <sup>3</sup> MAC	Not determined	25 ppm TWA 121 mg/m <sup>3</sup> TWA Possibility of significant uptake through the skin
Citrus Extract	Not determined	Not determined	Not determined
Distillates, petroleum, hydrotreated light	Not determined	Not determined	Not determined
Chemical Name	Malaysia	Philippines	Russia
D-Glucopyranose, oligomeric, C8-10 glycosides	Not determined	Not determined	Not determined
2-butoxyethanol	20 ppm TWA 96.7 mg/m <sup>3</sup> TWA Skin notation	skin - potential for cutaneous absorption 50 ppm TWA 240 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> MAC
Citrus Extract	Not determined	Not determined	Not determined

Distillates, petroleum, hydrotreated light	Not determined	Not determined	300 mg/m <sup>3</sup> STEL 100 mg/m <sup>3</sup> TWA
<b>Chemical Name</b>	<b>Thailand</b>	<b>Vietnam</b>	<b>Turkey</b>
D-Glucopyranose, oligomeric, C8-10 glycosides	Not determined	Not determined	Not determined
2-butoxyethanol	50 ppm TWA	Not determined	50 ppm STEL 246 mg/m <sup>3</sup> STEL Skin 20 ppm TWA 98 mg/m <sup>3</sup> TWA
Citrus Extract	Not determined	Not determined	Not determined
Distillates, petroleum, hydrotreated light	Not determined	Not determined	Not determined

## 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

#### Eye protection

Use eye protection according to EN 166, designed to protect against liquid splashes Tightly fitting safety goggles Safety glasses with side-shields

#### Hand protection

Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training Impervious gloves made of: Nitrile Neoprene  
Break through time >480 minutes  
Glove thickness >=0.4 mm

#### Respiratory protection

Be aware that liquid may penetrate the gloves. Frequent change is advisable.  
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators 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.

#### 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



### 8.2.3 Environmental exposure controls

#### Environmental exposure

Use appropriate containment to avoid environmental contamination See section 6 for more information

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

#### Physical state

Liquid

<b>Appearance</b>	No information available
<b>Odor</b>	Citrus
<b>Color</b>	Yellow
<b>Odor threshold</b>	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
<b>pH</b>	No information available	
<b>pH @ dilution</b>	No information available	
<b>Melting / freezing point</b>	No information available	
<b>Boiling point/range</b>	No information available	
<b>Flash point</b>	61 °C / 143 °F	Closed cup
<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>	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>	0.90 - 0.94	20 °C
<b>Bulk density</b>	No information available	
<b>Relative density</b>	No information available	
<b>Water solubility</b>	Dispersible	
<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>	No information available	

<b>Explosive properties</b>	Not applicable
<b>Oxidizing properties</b>	None known.

**9.2 Other information**

<b>Pour point</b>	-27°C / -16.6°F
<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**

Heat, flames and sparks.

**10.5 Incompatible materials**

Strong oxidizing agents. Strong acids. Strong reducing agents. Strong alkalies.

**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.
<b>Eye contact</b>	Causes serious eye damage.
<b>Skin contact</b>	Causes skin irritation. May cause an allergic skin reaction. May be absorbed through the skin in harmful amounts.
<b>Ingestion</b>	Harmful if swallowed. May be fatal if swallowed and enters airways.
<b>Unknown acute toxicity</b>	Not applicable.

**Toxicology data for the components**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
D-Glucopyranose, oligomeric, C8-10 glycosides	No data available	No data available	No data available
2-butoxyethanol	= 470 mg/kg ( Rat )	= 99 mg/kg ( Rabbit )	= 450 ppm ( Rat ) 4 h = 486 ppm ( Rat ) 4 h
Citrus Extract	No data available	No data available	No data available
Distillates, petroleum, hydrotreated light	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 5.2 mg/L ( Rat ) 4 h

<b>Sensitization</b>	May cause sensitization by skin contact.
<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. Inhalation. Ingestion. Eye contact.
<b>Routes of entry</b>	Skin absorption. Inhalation. Ingestion.
<b>Specific target organ toxicity - Single exposure</b>	Not classified
<b>Specific target organ toxicity - Repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.
<b>Other information</b>	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.

#### 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
D-Glucopyranose, oligomeric, C8-10 glycosides	No information available	No information available	No information available
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 EC50 Daphnia magna 24 h > 1000 mg/L EC50 Daphnia magna 48 h
Citrus Extract	No information available	No information available	No information available
Distillates, petroleum, hydrotreated light	= 45 mg/L LC50 Pimephales promelas 96 h = 2.2 mg/L LC50 Lepomis macrochirus 96 h = 2.4 mg/L LC50 Oncorhynchus mykiss 96 h	No information available	= 4720 mg/L LC50 Den-dronereides heteropoda 96 h

### 12.2 Persistence and degradability

Product is biodegradable. See component information below.

Chemical Name	Persistence and degradability
Distillates, petroleum, hydrotreated light	Readily biodegradable

### 12.3 Bioaccumulative potential

The product contains potentially bioaccumulating substances.

### 12.4 Mobility

#### Mobility

Dispersible in water.

#### Mobility in soil

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**

**Waste from residues/unused products** Dispose of in accordance with local regulations.

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

**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)**

**ADR/RID/ADN/ADG Hazard class** Not regulated

**IMDG/ANTAQ Hazard class** Not regulated

**ICAO/ANAC Hazard class/division** Not regulated

**14.4 Packing group**

**ADR/RID/ADN/ADG Packing group** Not regulated

**IMDG/ANTAQ Packing group** Not regulated

**ICAO/ANAC Packing group** 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**

**The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)**

**Australian Standard for the Uniform Scheduling of Drugs and Poisons**

2-butoxyethanol  
Schedule 6

**New Zealand Hazard Classification** Classified

**HSNO approval no.** HSR002503

**Group number** 6.1E, 6.1D, 6.3A, 6.5B, 8.3A

**National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC: 2011 (2003)].**

**National Occupational Health and Safety Commission's Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004) 3rd Edition].**

**National Occupational Health and Safety Commission's Exposure Standards for Atmospheric Contaminants in the occupational Environment [NOHSC:1003 (1995)].**

**Safe Work Australia.**

**Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).**

**Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG)**

**Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 [P.U.(A) 310/2013] (CLASS Regulations)**

**The Industry Code of Practice on Chemical Classification and Hazard Communication 2014 [P.U. (B) 128/2014] (ICOP)**

**International inventories**

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

This SDS is not for use in EU/EEA.

**16. Other Information**

**Prepared by** Global Regulatory Compliance - Chemicals (GRC - Chemicals) , Anne Karin (Anka) Fosse

**Supersedes Date:** 19-Sep-2016

**Revision date** 01-Dec-2018

**Version** 4

**This SDS has been revised in the following section(s)** All sections. 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

**HMIS classification**

Health	3
Flammability	1
Physical hazard	0
PPE	J

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