

Safety data sheet number PID1644

Version 11

Revision date 27/Nov/2019

Supersedes Date: 11/Jul/2017



## Safety Data Sheet VERSACLEAN\*

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

#### 1.1 Product identifier

Product name VERSACLEAN\*  
Product code PID1644

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

Recommended Use Oil Based System.

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

Serious eye damage/eye irritation	Category 2
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Environmental hazards Not classified

Physical Hazards Not classified

#### 2.2 Label elements



**Signal word**  
WARNING

**Hazard Statements**

H319 - Causes serious eye irritation

**Precautionary statements**

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

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

P337 + P313 - If eye irritation persists: Get medical advice/attention

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

**Contains**

C8-C26 branched and linear hydrocarbons – Distillates

Barite

Calcium chloride

Calcium carbonate

Calcium hydroxide

Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine

Crystalline silica (impurity)

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics\*

Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics\*

**2.3 Other hazards**

Not classified as PBT/vPvB by current EU criteria

### 3. Composition/information on Ingredients

**3.1 Substances**

Not applicable

**3.2 Mixtures**

Chemical Name	EC No	CAS No	Weight-%
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C8-C26 branched and linear hydrocarbons – Distillates	481-740-5	848301-67-7	0-60
Barite	236-664-5	13462-86-7	30-60
Calcium chloride	233-140-8	10043-52-4	5-10
Calcium carbonate	207-439-9	471-34-1	1-5
Calcium hydroxide	215-137-3	1305-62-0	1-<3
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	273-601-0	68990-47-6	<1
Crystalline silica (impurity)	238-878-4	14808-60-7	1-5
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*	926-141-6	RM1004246	0-60
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	920-107-4	RM1003179	0-60

#### Comments

Drilling fluid is a highly complex and variable blend of several proprietary products. Each drilling fluid is designed to meet the drilling requirements of a specific well. During the drilling process the composition and physical properties of the drilling fluid are constantly changing; therefore, a complete disclosure of a particular fluid's composition is impractical.

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

The viscosity of this product is high enough that it is not an aspiration risk and the H304 phrase does not apply

This product contains a small quantity of quartz, crystalline silica. Prolonged and repeated exposure to concentrations of crystalline silica exceeding the workplace exposure limit (WEL) may lead to chronic lung disease such as silicosis. IARC Monographs, Vol. 68, 1997, concludes that there is sufficient evidence that inhaled crystalline silica in the form of quartz or cristobalite from occupational sources causes cancer in humans. IARC Classification Group I. Because this product is a liquid, under normal and recommended use, exposure to Respirable Crystalline Silica will not apply.

\*Substances which have an EC Number that begins with the number "9" is a Provisional List Number. The list numbers published by ECHA do not have any legal significance. The EC substance definition and related classification & labelling has been developed in the framework of the Regulation (EC) No 1907/2006 (REACH). For information about the related CAS number see section 15 of this SDS.

## 4. First Aid Measures

### 4.1 First aid measures

<b>Inhalation</b>	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, minimize the risk of aspiration by properly positioning the affected person. Get medical attention if symptoms occur.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation persists.
<b>Eye Contact</b>	Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses, if worn. Get medical attention if any discomfort continues.

### 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
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hospital as soon as possible.

#### Symptoms

**Inhalation** Please see Section 11. Toxicological Information for further information.

**Ingestion** Please see Section 11. Toxicological Information for further information.

**Skin contact** 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. Firefighting 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 vapours

#### **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. Persons susceptible to allergic reactions should not handle this product.

#### 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.

## 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Exposure Limits

Because this product is a liquid, the dust-related Workplace Exposure Limits for the components do not apply.

Oil mist (mineral) workplace exposure limits are currently under review by legislative authorities. This workplace exposure limit (WEL) standard is applicable to highly refined mineral oils and is provided as a guidance limit only. LT. EXP = 5mg/m<sup>3</sup> and ST. EXP = 10mg/m<sup>3</sup>.

#### Component Information

Chemical Name	Arabic	Australia	Egypt
C8-C26 branched and linear	Not determined	Not determined	Not determined

hydrocarbons – Distillates			
Barite	Not determined	Not determined	Not determined
Calcium chloride	Not determined	Not determined	Not determined
Calcium carbonate	Not determined	10mg/m <sup>3</sup> TWAI	Not determined
Calcium hydroxide	5 mg/m <sup>3</sup> TWA	5mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	Not determined	Not determined	Not determined
Crystalline silica (impurity)	0.1 mg/m <sup>3</sup> TWA	0.1mg/m <sup>3</sup> TWA	Not determined
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*	Not determined	Not determined	Not determined
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Not determined	Not determined	Not determined
<b>Chemical Name</b>	<b>India</b>	<b>Indonesian</b>	<b>Japan</b>
C8-C26 branched and linear hydrocarbons – Distillates	Not determined	Not determined	Not determined
Barite	Not determined	Not determined	Not determined
Calcium chloride	Not determined	Not determined	Not determined
Calcium carbonate	Not determined	Not determined	Not determined
Calcium hydroxide	Not determined	5 mg/m <sup>3</sup> TWA	Not determined
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	Not determined	Not determined	Not determined
Crystalline silica (impurity)	Not determined	0.1 mg/m <sup>3</sup> TWA	0.03 mg/m <sup>3</sup> OEL
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*	Not determined	Not determined	Not determined
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Not determined	Not determined	Not determined
<b>Chemical Name</b>	<b>Kazakhstan</b>	<b>Kuwait</b>	<b>New Zealand</b>
C8-C26 branched and linear hydrocarbons – Distillates	Not determined	Not determined	Not determined
Barite	6 mg/m <sup>3</sup> MAC	Not determined	Not determined
Calcium chloride	Not determined	Not determined	Not determined
Calcium carbonate	Not determined	Not determined	10 mg/m <sup>3</sup> TWA
Calcium hydroxide	Not determined	Not determined	5 mg/m <sup>3</sup> TWA
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	Not determined	Not determined	Not determined
Crystalline silica (impurity)	1 mg/m <sup>3</sup> MAC	0.1 mg/m <sup>3</sup> TWA	0.1 mg/m <sup>3</sup> TWA Confirmed carcinogen
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*	Not determined	Not determined	Not determined
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Not determined	Not determined	Not determined
<b>Chemical Name</b>	<b>Malaysia</b>	<b>Philippines</b>	<b>Russia</b>
C8-C26 branched and linear hydrocarbons – Distillates	Not determined	Not determined	Not determined
Barite	Not determined	Not determined	6 mg/m <sup>3</sup> TWA Fibrogenic substance 0242
Calcium chloride	Not determined	Not determined	2 mg/m <sup>3</sup> MAC (aerosol)
Calcium carbonate	Not determined	Not determined	Not determined
Calcium hydroxide	5 mg/m <sup>3</sup> TWA	Not determined	Skin notation 2 mg/m <sup>3</sup> MAC

			Skin
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	Not determined	Not determined	Not determined
Crystalline silica (impurity)	0.1 mg/m <sup>3</sup> TWA	Not determined	3 mg/m <sup>3</sup> STEL 1 mg/m <sup>3</sup> TWA Fibrogenic substance 1177, 1178
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*	Not determined	Not determined	Not determined
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Not determined	Not determined	Not determined
Chemical Name	Thailand	Vietnam	Turkey
C8-C26 branched and linear hydrocarbons – Distillates	Not determined	Not determined	Not determined
Barite	Not determined	Not determined	Not determined
Calcium chloride	Not determined	Not determined	Not determined
Calcium carbonate	Not determined	10 mg/m <sup>3</sup> TWA	Not determined
Calcium hydroxide	15 mg/m <sup>3</sup> TWA 5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	Not determined	Not determined	Not determined
Crystalline silica (impurity)	0.025 mg/m <sup>3</sup> TWA	Not determined	Not determined
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*	Not determined	Not determined	Not determined
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	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 Provide mechanical general and/or local exhaust ventilation to prevent release of vapor or mist into work environment.

### Personal protective equipment

#### Eye protection

Eye protection must conform to standard EN 166 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  
Use protective gloves made of: Nitrile PVA Neoprene PVC  
Break through time >480 minutes  
Glove thickness 0.3 mm

#### Respiratory protection

Be aware that liquid may penetrate the gloves. Frequent change is advisable.  
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

#### Skin and body protection

spaces, respiratory protection with air supply must be used.  
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
Appearance	Viscous
Odour	Hydrocarbon like
Colour	Dark brown
Odour threshold	Not applicable

Property	Values	Remarks
pH	No information available	
pH @ dilution	No information available	
Melting / freezing point	No information available	
Boiling point/range	> 180 °C / 356 °F	
Flash point	> 75 °C / > 167 °F	PMCC
Evaporation rate	No information available	
Flammability (solid, gas)	Not applicable	
Flammability Limit in Air		
Upper flammability limit	Not applicable	
Lower flammability limit	Not applicable	
Vapour pressure	No information available	
Vapour density	No information available	
Specific gravity	1.5 - 2.3	
Bulk density	No information available	
Relative density	No information available	
Water solubility	Insoluble in water	
Solubility in other solvents	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	>20.5 mm <sup>2</sup> /s	@ 40 °C
Dynamic viscosity	No information available	
log Pow	Not determined	

Explosive properties Not applicable

**Oxidising properties** None known

**9.2 Other information**

**Pour point** No information available  
**Molecular weight** No information available  
**VOC content(%)** None  
**Density** 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 polymerisation**

Hazardous polymerisation does not occur.

**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**

**Product information**

This product contains a small quantity of quartz, crystalline silica. Prolonged and repeated exposure to concentrations of crystalline silica exceeding the workplace exposure limit (WEL) may lead to chronic lung disease such as silicosis. Because this product is a liquid, under normal and recommended use, exposure to Respirable Crystalline Silica will not apply.

**Inhalation**

Vapors may irritate throat and respiratory system.

**Eye contact**

Causes serious eye irritation.

<b>Skin contact</b>	Prolonged contact may cause redness and irritation. Repeated exposure may cause skin dryness or cracking. Components of the product may be absorbed into the body through the skin.
<b>Ingestion</b>	Ingestion may cause stomach discomfort.
<b>Unknown acute toxicity</b>	Not applicable.

**Toxicology data for the components**

<b>Chemical Name</b>	<b>LD50 Oral</b>	<b>LD50 Dermal</b>	<b>LC50 Inhalation</b>
C8-C26 branched and linear hydrocarbons – Distillates	No data available	No data available	No data available
Barite	> 15000 mg/kg ( Rat )	No data available	No data available
Calcium chloride	= 1000 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	No data available
Calcium carbonate	= 6450 mg/kg ( Rat )	No data available	No data available
Calcium hydroxide	= 7340 mg/kg ( Rat )	No data available	No data available
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	> 2020 mg/kg (Rat) Literature data	> 2000 mg/kg (Rat) OECD 402 - Duration: 24h Literature data	No data available
Crystalline silica (impurity)	No data available	No data available	No data available
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	> 5000 mg/kg (OECD 401), Rat	> 5000 mg/kg (OECD 402), Rabbit	= 4951 mg/kg (OECD 403) 4H, Rat

<b>Sensitisation</b>	EUH208 - Contains ( Fatty acids, tall-oil, rxn pdcts with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine ). May produce an allergic reaction.
<b>Mutagenic effects</b>	This product does not contain any known or suspected mutagens.
<b>Carcinogenicity</b>	Crystalline silica dust is listed by IARC in Group 1 as known to cause lung cancer in humans, if inhaled.
<b>Reproductive toxicity</b>	This product does not contain any known or suspected reproductive hazards.
<b>Routes of Exposure</b>	Eye contact. Skin contact.
<b>Routes of entry</b>	Eye contact. Skin contact.
<b>Specific target organ toxicity - Single exposure</b>	Not classified
<b>Specific target organ toxicity - Repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	The viscosity of this product is high enough that it is not an aspiration risk and the H304 phrase does not apply.
<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

See component information below.

#### Toxicity to fish

See component information below.

#### Toxicity to daphnia and other aquatic invertebrates

See component information below.

#### Toxicology data for the components

Chemical Name	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
C8-C26 branched and linear hydrocarbons – Distillates	No information available	No information available	No information available
Barite	No information available	No information available	No information available
Calcium chloride	= 10650 mg/L LC50 Lepomis macrochirus 96 h	No information available	2,400 mg/L EC50 (Daphnia magna) = 48 h
Calcium carbonate	No information available	No information available	No information available
Calcium hydroxide	= 160 mg/L LC50 Gambusia affinis 96 h	No information available	No information available
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	OECD 203 Fish LC50 > 100 mg/l - Duration h: 96 Literature data	OECD 201 Algae EC50 > 100 mg/l - Duration h: 72 Literature data	OECD 202 Daphnia magna NOEC = 100 mg/l - Duration h: 48 Literature data
Crystalline silica (impurity)	LC50 Danio rerio (zebra fish) : > 10000 mg/l 96h	EC50: > 1000 mg/l 72h	LC50 Daphnia magna (Water flea): > 10000 mg/l 24h
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*	LC50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l Exposure time: 96 h Test Type: semi-static test Test substance: WAF Method: OECD Test Guideline 203 Remarks: Information given is based on data obtained from similar substances.	EL50 (Pseudokirchneriella subcapitata (green algae)): > 1 - 3 mg/l Exposure time: 72 h Test Type: static test Test substance: WAF Method: OECD Test Guideline 201 Remarks: Information given is based on data obtained from similar substances.	EL50 (Water flea (Daphnia magna)): 1,4 mg/l Exposure time: 48 h Test Type: static test Test substance: WAF Method: OECD Test Guideline 202 Remarks: Information given is based on data obtained from similar substances.
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	> 1000 mg/l (OECD 201) Oncorhynchus mykiss/96 hours	> 1000 mg/l (OECD 201) Pseudokirchneriella subcapitata/72 hours	> 1000 mg/l (OECD 202) Daphnia magna/48 hours

### 12.2 Persistence and degradability

No product level data available. See component information below.

Chemical Name	Persistence and degradability
Barite	Inorganic compound

Calcium chloride	Inorganic compound
Calcium carbonate	Not Applicable - Inorganic chemical.
Calcium hydroxide	Hydrolyzes
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	Inherently biodegradable
Crystalline silica (impurity)	Inorganic compound
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*	Inherently biodegradable OECD 301F : 58.6% Duration 28 days
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Readily biodegradable

### 12.3 Bioaccumulative potential

No product level data available. See component information below.

Chemical Name	Bioaccumulation
Barite	Product/Substance is inorganic
Calcium chloride	Product/Substance is inorganic
Calcium carbonate	Product/Substance is inorganic
Calcium hydroxide	No bioaccumulation potential
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	No bioaccumulation expected due to high molecular weight.
Crystalline silica (impurity)	Product/Substance is inorganic
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*	Does not bioaccumulate
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Does not bioaccumulate

### 12.4 Mobility

#### Mobility

Insoluble in water. See component information below.

Chemical Name	Mobility
Barite	Insoluble in water
Calcium chloride	Soluble in water
Calcium carbonate	Insoluble in water
Calcium hydroxide	Easily soluble
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	No information available
Crystalline silica (impurity)	Insoluble in water
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*	Insoluble in water
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Insoluble

#### Mobility in soil

See component information below.

Chemical Name	Mobility in soil
Barite	Not expected to adsorb on soil
Calcium chloride	After release, disperses through ground water
Calcium carbonate	Not expected to adsorb on soil
Calcium hydroxide	Not expected to adsorb on soil
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	No information available
Crystalline silica (impurity)	Not expected to adsorb on soil
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*	No information available
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	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 transported/delivered using a registered waste carrier for local recycling 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 Hazard class**

Not regulated

ICAO Hazard class/division Not regulated

**14.4 Packing group**

ADR/RID/ADN/ADG Packing Group Not regulated

IMDG Packing group Not regulated

ICAO 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**

Oil-based muds containing mixtures of products listed in Chapters 17 and 18 of the IBC Code and the latest MEPC.2/Circular are permitted to be carried under Annex II of MARPOL and resolution A.673, (16) Offshore Supply Vessel 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:  
The Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

**International inventories**

USA, Toxic Substances Control Act inventory (TSCA)	Complies
Canada (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)	Does not comply
Inventory - New Zealand - Inventory of Chemicals (NZIoC)	Does not comply

CAS Number 64742-47-8 can be used to identify the substance given a list number in section 3 in areas not subject to the REACH regulation.

## 16. Other Information

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**Version** 11

**This SDS has been revised in the following section(s)** 1, 2, 3, 7, 8, 11, 12, 15, 16 No changes with regard to classification have been made. Updated according to GHS/CLP.

**Key literature references and sources for data**

www.ChemADVISOR.com

Supplier

National Chemical Inventories

National regulatory information

National occupational exposure limits

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