

Safety data sheet number PID1231  
Version 13  
Revision date 09/Nov/2018  
Supersedes Date: 09/Jul/2018



## Safety Data Sheet POLY-PLUS\*

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

#### 1.1 Product identifier

Product name POLY-PLUS\*  
Product code PID1231

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

Recommended Use Shale control agent. Viscosifier. Friction reducer. Flocculating agent

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 Not classified

Environmental hazards Not classified

Physical Hazards Not classified

#### 2.2 Label elements

##### Hazard Statements

This product is not classified as hazardous therefore no (H) hazard statements assigned.

**Precautionary statements**

This product is not classified as hazardous therefore has no (P) precautionary statements assigned.

**Contains**

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

Isotridecanol, ethoxylated

**2.3 Other hazards**

Not classified as PBT/vPvB by current EU criteria  
May cause slight irritation

**Australian statement of hazardous/dangerous nature**

Classified as Non-Hazardous according to the criteria of NOHSC.  
NON-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-%
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	920-107-4	RM1003179	30-60
Isotridecanol, ethoxylated	NLP	69011-36-5	<3

**Comments**

OECD Test No. 437: Bovine Corneal Opacity and Permeability Test Method for Identifying i) Chemicals Inducing Serious Eye Damage and ii) Chemicals Not Requiring Classification for Eye Irritation or Serious Eye Damage: Not Irritant

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

According to Supplier, EUH066 will not apply for this product.

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

\*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**

**Inhalation**

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. Seek medical attention if irritation occurs.
<b>Skin contact</b>	Wash skin thoroughly with soap and water. 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**

**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**

**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**

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

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

None known.

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

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

None known.

#### **Hazardous combustion products**

Fire or high temperatures create: Carbon oxides (CO<sub>x</sub>), Nitrogen oxides (NO<sub>x</sub>), Hydrogen cyanide (hydrocyanic acid).

### **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. If spilled, take caution, as material can cause surfaces to become very slippery.

### 6.2 Environmental precautions

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to applicable federal, state and local regulations.

**Environmental exposure controls**

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 Do not eat, drink or smoke when using this product 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.

**Storage precautions** Keep containers tightly closed in a dry, cool and well-ventilated place Avoid heat, flames and other sources of ignition. Keep away from direct sunlight Avoid contact with: Oxidizing agents Protect from freezing Keep at >5 - <30°C

**Storage class** Chemical storage.

**Packaging materials** Use specially constructed containers only

## 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Exposure Limits

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>.  
 No biological limit allocated

#### Component Information

Chemical Name	Arabic	Australia	Egypt
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Not determined	Not determined	Not determined
Isotridecanol, ethoxylated	Not determined	Not determined	Not determined
Chemical Name	India	Indonesian	Japan
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Not determined	Not determined	Not determined
Isotridecanol, ethoxylated	Not determined	Not determined	Not determined
Chemical Name	Kazakhstan	Kuwait	New Zealand
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Not determined	Not determined	Not determined
Isotridecanol, ethoxylated	Not determined	Not determined	Not determined
Chemical Name	Malaysia	Philippines	Russia
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Not determined	Not determined	Not determined
Isotridecanol, ethoxylated	Not determined	Not determined	Not determined
Chemical Name	Thailand	Vietnam	Turkey
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Not determined	Not determined	Not determined
Isotridecanol, ethoxylated	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: PVC Nitrile Neoprene  
 Break through time >480 minutes  
 Glove thickness >=0.4 mm

<b>Respiratory protection</b>	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 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.
<b>Hygiene Measures</b>	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>	Viscous
<b>Odour</b>	Hydrocarbon like
<b>Colour</b>	milky
<b>Odour threshold</b>	Not applicable

Property	Values	Remarks
pH	No information available	
pH @ dilution	8.0 - 9.0	@ 1%
Melting / freezing point	No information available	
Boiling point/range	No information available	
Flash point	> 93.3 °C / > 200 °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	0.002 mmHg	@ 20°C (68°F) °C
Vapour density	No information available	
Specific gravity	1.07 - 1.10	20 °C
Bulk density	No information available	
Relative density	No information available	
Water solubility	Miscible with water.	
Solubility in other solvents	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	> 20.5 cSt	@ 40 °C

<b>Dynamic viscosity</b>	No information available
<b>log Pow</b>	No information available
<b>Explosive properties</b>	Not applicable
<b>Oxidising properties</b>	None known
<b>9.2 Other information</b>	
<b>Pour point</b>	-28.9°C / -20°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 polymerisation**

Hazardous polymerisation does not occur.

### 10.4 Conditions to avoid

Keep away from direct sunlight. Avoid frost. Keep at temperatures between >5-<30°C. Avoid heat, flames and other sources of ignition.

### 10.5 Incompatible materials

Oxidizing agents.

### 10.6 Hazardous decomposition products

See Section 5.2.

## 11. Toxicological Information

### 11.1 Information on toxicological effects

#### **Acute toxicity**

#### **Product information**

OECD Test No. 437: Bovine Corneal Opacity and Permeability Test Method for Identifying i) Chemicals Inducing Serious Eye Damage and ii) Chemicals Not Requiring Classification for Eye Irritation or Serious Eye Damage: Not Irritant.

#### **Inhalation**

Inhalation of vapours in high concentration may cause irritation of respiratory system.

<b>Eye contact</b>	May cause slight irritation.
<b>Skin contact</b>	Prolonged contact may cause redness and irritation.
<b>Ingestion</b>	Ingestion may cause stomach discomfort.
<b>Unknown acute toxicity</b>	Not applicable.

**Toxicology data for the components**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
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
Isotridecanol, ethoxylated	500-2000 mg/kg Rat	> 2000 mg/kg	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>	Inhalation.
<b>Routes of entry</b>	Inhalation.
<b>Specific target organ toxicity - Single exposure</b>	Not classified
<b>Specific target organ toxicity - Repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	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. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

**Toxicity to algae**

IC50- 72 hours: > 100 mg/l (PRODUCT).



**Toxicity to fish**

LC50 - Oncorhynchus mykiss - 96 hours: > 100 mg/l (PRODUCT).

**Toxicity to daphnia and other aquatic invertebrates**

EC50 - Daphnia - 48 hours: > 100 mg/l (PRODUCT).

**Toxicology data for the components**

Chemical Name	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
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
Isotridecanol, ethoxylated	= 1-10 mg/l (OECD 203) Cyprinus carpio/96 hours	= 1-10 mg/l (OECD 201) Desmodesmus subspicatus/72 hours	= 1-10 mg/l (OECD 202) Daphnia magna/72 hours

**12.2 Persistence and degradability**

Readily biodegradable. See component information below.

Chemical Name	Persistence and degradability
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Readily biodegradable
Isotridecanol, ethoxylated	Readily biodegradable

**12.3 Bioaccumulative potential**

Bioaccumulation is unlikely. See component information below.

Chemical Name	Bioaccumulation
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Does not bioaccumulate
Isotridecanol, ethoxylated	Does not bioaccumulate

**12.4 Mobility**

**Mobility**

The product is miscible with water. May spread in water systems. See component information below.

Chemical Name	Mobility
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	Insoluble
Isotridecanol, ethoxylated	Practically insoluble

**Mobility in soil**

See component information below.

Chemical Name	Mobility in soil
Hydrocarbons, C12-C15, n-alkanes, isoalkanes < 2% aromatics*	No information available

Isotridecanol, ethoxylated	No information available
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**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**

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 Harmonised System of Classification and Labelling of Chemicals (GHS)

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

No poisons schedule number allocated

**New Zealand Hazard Classification** Not classified

**HSNO approval no.** Not required.

**Group number** Not required.

**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

**USA, Toxic Substances Control Act inventory (TSCA)** Complies

**Canada (DSL)** Complies

**Philippines (PICCS)** Complies

**Inventory - Japan - Existing and** Complies

**New Chemicals list**

**China (IECSC)** Complies

**Australia (AICS)** Complies

**Korea (KECL)** Complies

**Inventory - New Zealand - Inventory of Chemicals (NZIoC)** Complies

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

<b>Prepared by</b>	Global Regulatory Compliance - Chemicals (GRC - Chemicals) , Anne Karin (Anka) Fosse
<b>Supersedes Date:</b>	09/Jul/2018
<b>Revision date</b>	09/Nov/2018
<b>Version</b>	13
<b>This SDS has been revised in the following section(s)</b>	SECTION 6: Accidental release measures 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

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