

## Safety Data Sheet POLY- PLUS\* EHV

### 1. Identification

#### 1.1 Product identifier

**Product name** POLY- PLUS\* EHV  
**Product code** PID11709

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

**Recommended Use** Drilling fluid additive.  
**Uses advised against** Consumer use

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

**Supplier**  
M-I L.L.C.

P.O.Box 42842  
Houston, TX 77242  
www.miswaco.slb.com  
Telephone: 1 281-561-1511

M-I SWACO, A Schlumberger Company  
200 - 125, 9th Avenue SE  
Calgary, Alberta T2G 0P6, Canada  
Telephone: 1-780-962-8221

**E-mail address** sdsmi@slb.com

**Prepared by**  
Global Regulatory Compliance - Chemicals (GRC - Chemicals)

#### 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**

### **Signal word**

None

### **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.

**Unknown acute toxicity** Not Applicable.

## **3. Composition/information on Ingredients**

### **3.1 Substances**

Not Applicable

### **3.2 Mixtures**

Not Applicable

Component	CAS-No	Weight % - range
Anionic acrylamide copolymer	Proprietary	60 - 100
Residual acrylamide (impurity)	Proprietary	<0.1

### **Comments**

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret

## **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. Seek medical attention if irritation occurs.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water 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. Continue to rinse for at least 15 minutes. 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.

**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**

**Notes to physician** Treat symptomatically

### **5. Fire-fighting measures**

#### **5.1 Extinguishing media**

**Suitable extinguishing media**

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

**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**

Suspended dust may present a dust explosion hazard.

**Hazardous combustion products**

Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke), Nitrogen oxides (NO<sub>x</sub>).

#### **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 identified in Section 8. Keep unnecessary personnel away. Prevent further leakage or spillage if safe to do so.

#### **6.2 Environmental precautions**

As local regulations may vary; all waste must be disposed/recycled/reclaimed in accordance with federal, state, and local environmental control regulations.

Large spills released to the environment may disturb the natural chemical balance of soil/fresh water.

**Environmental exposure controls**

Local authorities should be advised if significant spillages cannot be contained.

#### **6.3 Methods and materials for containment and cleaning up**

**Methods for containment**

Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

**Methods for cleaning up**

Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Take precautionary measures against static

discharges.

#### **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 dust. Wear personal protective equipment. Avoid dust formation. Take precautionary measures against static discharges.

#### **Hygiene measures**

Use good work and personal hygiene practices to avoid exposure. Do not eat, drink or smoke when using this product.

### **7.2 Conditions for safe storage, including any incompatibilities**

**Technical measures/precautions** Ensure adequate ventilation. Provide appropriate exhaust ventilation at places where dust is formed. Keep airborne concentrations below exposure limits.

**Storage precautions** Keep away from open flames, hot surfaces and sources of ignition. Keep containers tightly closed in a dry, cool and well-ventilated place.

## **8. Exposure controls/personal protection**

### **8.1 Control parameters**

#### **Exposure limits**

**Control as an ACGIH particulate not otherwise specified (PNOS): 10 mg/m<sup>3</sup> (Inhalable); 3 mg/m<sup>3</sup> (Respirable) and an OSHA particulate not otherwise regulated (PNOR): 15 mg/m<sup>3</sup> (Total); 5 mg/m<sup>3</sup> (Respirable).**

Component	ACGIH TLV	OSHA PEL
Anionic acrylamide copolymer	Not Determined	Not Determined
Residual acrylamide (impurity)	0.03 mg/m <sup>3</sup>	0.3 mg/m <sup>3</sup> TWA

### **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.

#### **Personal protective equipment**

##### **Eye protection**

Tightly fitting safety goggles.

##### **Hand protection**

Wear chemical resistant gloves such as nitrile or neoprene.

##### **Respiratory protection**

All respiratory protection equipment should be used within a comprehensive respiratory protection program that meets the requirements of 29 CFR 1910.134 (U.S. OSHA Respiratory Protection Standard) or local equivalent.

If exposed to airborne mist/aerosol of this product, use at least a NIOSH-approved N95 half-mask disposable or re-usable particulate respirator. In work environments containing oil mist/aerosol, use at least a NIOSH-approved P95 half-mask disposable or reusable particulate respirator. If exposed to vapors from this product use a NIOSH/MSHA-approved respirator with an Organic Vapor cartridge.

<b>Skin and body protection</b>	Wear suitable protective clothing.
<b>Hygiene measures</b>	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>	Solid	
<b>Appearance</b>	Powder	
<b>Color</b>	White - Tan	
<b>Odor</b>	Odorless	
<b>Odor threshold</b>	Not applicable	
<b>Property</b>	<b>Values</b>	<b>Remarks</b>
<b>pH</b>	Not applicable	
<b>pH @ dilution</b>	4 - 9	5 g/L in water
<b>Melting/freezing point</b>	No information available	
<b>Boiling point/range</b>	No information available	
<b>Flash point</b>	Not Applicable	PMCC
<b>Evaporation rate (BuAc =1)</b>	No information available	
<b>Flammability (solid, gas)</b>	Not Applicable	
<b>Flammability Limits in Air</b>		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
<b>Vapor pressure</b>	0 mmHg	
<b>Vapor density</b>	Not applicable	
<b>Specific gravity</b>	No information available	
<b>Bulk density</b>	50 lb/cu.ft.	
<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>Dynamic viscosity</b>	No information available	
<b>Log Pow</b>	No information available	
<b>Explosive properties</b>	Suspended dust may present a dust explosion hazard	
<b>Oxidizing properties</b>	None known.	

### 9.2 Other information

<b>Pour point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC content(%)</b>	None
<b>Density</b>	No information available

## 10. Stability and reactivity

### 10.1 Reactivity

No data available.

### 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**

Avoid dust formation. Heat, flames and sparks.

#### **10.5 Incompatible materials**

Strong oxidizing agents.

#### **10.6 Hazardous decomposition products**

When heated strongly or burned, oxides of carbon and harmful organic chemical fumes are released. See also section 5.2.

### **11. Toxicological information**

#### **11.1 Information on toxicological effects**

##### **Acute toxicity**

**Inhalation** Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough.

**Eye contact** Dust may cause mechanical irritation.

**Skin contact** Repeated exposure may cause skin dryness or cracking.

**Ingestion** Irritant; may cause pain or discomfort to mouth, throat and stomach.

##### **Toxicology data for the components**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Anionic acrylamide copolymer	No data available	No data available	No data available
Residual acrylamide (impurity)	= 124 mg/kg ( Rat )	= 400 mg/kg ( Rat ) = 1680 µL/kg ( Rabbit )	No data available

Component	IARC Group 1 or 2	ACGIH - Carcinogens	OSHA listed carcinogens	NTP
Anionic acrylamide copolymer	No data available	No data available	No data available	No data available
Residual acrylamide (impurity)	Group 2A; Monograph 60 [1994] Group 2A; Supplement 7 [1987]	A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans	Present	Reasonably Anticipated To Be A Human Carcinogen

**Sensitization** Not classified.

**Mutagenic effects** No evidence of mutagenic properties.

**Carcinogenicity** No evidence of carcinogenic properties.

**Reproductive toxicity** No evidence of toxicity to reproduction.

**Developmental toxicity** Not known to cause birth defects or have a deleterious effect on a developing fetus.

**Routes of exposure** Inhalation. Skin contact. Eye contact.

**Routes of entry** Inhalation.

**Specific target organ toxicity (single exposure)** Not classified

**Specific target organ toxicity (repeated exposure)** Not classified.

**Aspiration hazard**

Not classified.

## 12. Ecological information

### 12.1 Toxicity

**Toxicity to algae**

No product level data available. See component information below.

**Toxicity to fish**

No product level data available. See component information below.

**Toxicity to daphnia and other aquatic invertebrates**

No product level data available. See component information below.

Component	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Anionic acrylamide copolymer	No information available	No information available	No information available
Residual acrylamide (impurity)	103 - 115 mg/L LC50 Pimephales promelas 96 h = 124 mg/L LC50 Pimephales promelas 96 h 74 - 150 mg/L LC50 Oncorhynchus mykiss 96 h 137 - 191 mg/L LC50 Oncorhynchus mykiss 96 h 81 - 150 mg/L LC50 Lepomis macrochirus 96 h	No information available	= 98 mg/L EC50 Daphnia magna 48 h

### 12.2 Persistence and degradability

No product level data available.

### 12.3 Bioaccumulative potential

No data available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)

This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

### 12.6 Other adverse effects.

None known.

## 13. Disposal considerations

### 13.1 Waste treatment methods

**Disposal Method**

Disposal should be made in accordance with federal, state and local regulations.

**Contaminated packaging**

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

## 14. Transport information

### 14.1 UN Number

UN No. (DOT)	Not regulated
UN No. (TDG)	Not regulated
UN/ID No. (ADR/RID/ADN/ADG)	Not regulated
UN No. (IMDG)	Not regulated
UN No. (ICAO)	Not regulated

### 14.2 Proper shipping name

The product is not covered by international regulation on the transport of dangerous goods

### 14.3 Hazard class(es)

DOT Hazard class	Not regulated
TDG Hazard class	Not regulated
ADR/RID/ADN/ADG Hazard class	Not regulated
IMDG Hazard class	Not regulated
ICAO Hazard class/division	Not regulated

### 14.4 Packing group

DOT Packing group	Not regulated
TDG Packing group	Not regulated
ADR/RID/ADN/ADG Packing group	Not regulated
IMDG Packing group	Not regulated
ICAO Packing group	Not regulated

### 14.5 Environmental hazard

Marine pollutant	No
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### 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 MISDS@slb.com for info regarding transport in Bulk.

## 15. Regulatory information

### International inventories

USA (TSCA)	Complies
Canada (DSL)	Complies.
European Union (EINECS and ELINCS)	Complies
Philippines (PICCS)	Complies
Japan (ENCS)	Complies
China (IECSC)	Complies
Australia (AICS)	Complies
Korean (KECL)	Complies
New Zealand (NZIoC)	Complies

### SARA 311/312 Hazard Categories

Not a SARA 311/312 hazard.



Component	SARA 302 / TPQs	SARA 313	CERCLA RQ
Anionic acrylamide copolymer	N/A	N/A	N/A
Residual acrylamide (impurity)	1000 lb lower TPQ 10000 lb upper TPQ	0.1 %	5000 lb final RQ 2270 kg final RQ

#### State Comments

Proposition 65: This product is not known to contain chemicals considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing cancer and/or reproductive toxicity at levels that are expected to pose a significant risk under anticipated use conditions.

#### Residual acrylamide (impurity)

developmental toxicity  
male reproductive toxicity  
carcinogen

## 16. Other information

**Supersedes date** 29/Jul/2015

**Revision date** 19/Oct/2016

**Version** 8

**The following sections have been revised:** 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING 3. Composition/information on Ingredients 5. Fire-fighting measures 6. Accidental release measures 7. Handling and storage 8. EXPOSURE CONTROLS / PERSONAL PROTECTION 15. Regulatory Information

#### HMIS classification

Health 0  
Flammability 0  
Physical hazard 0  
PPE B

N/A - Not Applicable, N/D - Not Determined.

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