SDS no. PID11709

Version 8

Revision date 19/Oct/2016 Supersedes date 29/Jul/2015



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

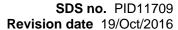
2. Hazards identification

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

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation

develops or if breathing becomes difficult.

Ingestion Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth

to an unconscious person. Seek medical attention if irritation occurs.

Skin contactWash off immediately with soap and plenty of water removing all contaminated clothes and

shoes. Get medical attention immediately if symptoms occur.

Eye contact 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.

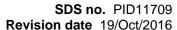
4.2 Most important symptoms and effects, both acute and delayed

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





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. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Fog, Alcohol Foam, CO2, 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 (NOx).

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/m³ (Inhalable); 3 mg/m³ (Respirable) and an OSHA particulate not otherwise regulated (PNOR): 15 mg/m³ (Total); 5 mg/m³ (Respirable).

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

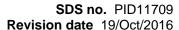
Personal protective equipment

Eye protection Hand protection Respiratory protection Tightly fitting safety goggles.

Wear chemical resistant gloves such as nitrile or neoprene.

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 reuseable particulate respirator. If exposed to vapors from this product use a NIOSH/MSHA-approved respirator with an Organic Vapor cartridge.





Skin and body protection Wear suitable protective clothing.

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

Physical state Solid
Appearance Powder
Color White - Tan
Odor Odorless
Odor threshold Not applicable

<u>Property</u> <u>Values</u> <u>Remarks</u>

pH Not applicable

pH @ dilution 4 - 9 5 g/L in water

Melting/freezing point No information available

Boiling point/range No information available

Flash point Not Applicable PMCC

Evaporation rate (BuAc =1) No information available

Flammability (solid, gas) Not Applicable

Flammability Limits in Air

Upper flammability limitNo information availableLower flammability limitNo information available

Vapor pressure0 mmHgVapor densityNot applicable

Specific gravity No information available

Bulk density50 lb/cu.ft.Water solubilitySoluble in water

Solubility in other solvents
Autoignition temperature
Decomposition temperature
Kinematic viscosity
Dynamic viscosity
Log Pow

No information available

Explosive properties Suspended dust may present a dust explosion hazard

Oxidizing properties None known.

9.2 Other information

Pour point No information available Molecular weight No information available

VOC content(%) None

Density 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	A3 Confirmed Animal	Present	Reasonably Anticipated To
	[1994]	Carcinogen with Unknown		Be A Human Carcinogen
	Group 2A; Supplement 7	Relevance to Humans		_
	[1987]			

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 toxicityNot 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

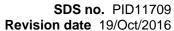
(single exposure)

Specific target organ toxicity

(repeated exposure)

Not classified

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
	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		= 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)
UN No. (TDG)
UN/ID No. (ADR/RID/ADN/ADG)
UN No. (IMDG)
UN No. (ICAO)

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

14.4 Packing group

DOT Packing group

TDG Packing group

ADR/RID/ADN/ADG Packing group

IMDG Packing group

ICAO Packing group

Not regulated
Not regulated
Not regulated
Not regulated
Not regulated

14.5 Environmental hazard

Marine pollutant 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 MISDS@slb.com for info regarding transport in Bulk.

15. Regulatory information

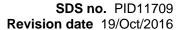
International inventories

USA (TSCA) Complies Canada (DSL) Complies. **European Union (EINECS and ELINCS)** Complies **Philippines (PICCS)** Complies Japan (ENCS) Complies China (IECSC) Complies Complies Australia (AICS) Complies Korean (KECL) 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	0.1 %	5000 lb final RQ
	10000 lb upper TPQ		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.

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.

^{*}A mark of M-I L.L.C., a Schlumberger Company