HALLIBURTON

SAFETY DATA SHEET

Product Trade Name: POLY-BORE™

Revision Date: 29-Jun-2018 Revision Number: 23

1. Identification

1.1. Product Identifier

Product Trade Name: POLY-BORE™

Synonyms None
Chemical Family: Polymer
Internal ID Code HM003740

1.2 Recommended use and restrictions on use

Application: Stabilizer

Uses advised against No information available

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier

Baroid Fluid Services

Product Service Line of Halliburton Energy Services, Inc.

P.O. Box 1675 Houston, TX 77251

Telephone: (281) 871-4000

Halliburton Energy Services, Inc. 645 - 7th Ave SW Suite 1800

Calgary, AB T2P 4G8 Canada

Prepared By Chemical Stewardship

Telephone: 1-281-871-6107

e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number:

Emergency Telephone Number 1-866-519-4752 or 1-760-476-3962

Global Incident Response Access Code: 334305

Contract Number: 14012

2. Hazards Identification

2.1 Classification in accordance with paragraph (d) of §1910.1200

As adopted by the competent authority, this product does not require an SDS or hazard warning label.

Not classified

2.2. Label Elements

Hazard Pictograms

Signal Word: Not Classified

Hazard Statements Not Hazardous

Precautionary Statements

PreventionNoneResponseNoneStorageNoneDisposalNone

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Contains no hazardous substances in	NA	60 - 100%	Not classified
concentrations above cut-off values			
according to the competent authority			

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. First Aid Measures

4.1. Description of first aid measures

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

irritation develops or if breathing becomes difficult.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get medical attention if irritation persists.

SkinWash with soap and water. Get medical attention if irritation persists.
Ingestion
Under normal conditions, first aid procedures are not required.

4.2 Most important symptoms/effects, acute and delayed

No significant hazards expected.

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

All standard fire fighting media

Extinguishing media which must not be used for safety reasons

None known.

5.2 Specific hazards arising from the substance or mixture

Special exposure hazards in a fire

Decomposition in fire may produce harmful gases.

5.3 Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Slippery when wet. Avoid creating and breathing dust. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

See Section 8 for additional information

6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up

Scoop up and remove.

7. Handling and storage

7.1. Precautions for safe handling

Handling Precautions

Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust. Slippery when wet. Ensure adequate ventilation. Wash hands after use. Launder contaminated clothing before reuse. Use appropriate protective equipment.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store away from oxidizers. Store in a cool, dry location. Keep container closed when not in use. Keep from excessive heat. Product has a shelf life of 24 months.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Contains no hazardous	NA	Not applicable	Not applicable
substances in concentrations			
above cut-off values according			
to the competent authority			

8.2 Appropriate engineering controls

Engineering Controls Use in a well ventilated area.

8.3 Individual protection measures, such as personal protective equipment

Personal Protective Equipment If engineering controls and work practices cannot prevent excessive exposures,

the selection and proper use of personal protective equipment should be

determined by an industrial hygienist or other qualified professional based on the

specific application of this product.

Respiratory Protection Not normally necessary.

Hand Protection Normal work gloves. **Skin Protection** Normal work coveralls.

Eye Protection Wear safety glasses or goggles to protect against exposure.

Other Precautions None known.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: Powder Color White to yellow

Odor: Odorless Odor No information available

Threshold:

Property
Remarks/ - Method

pH: 7-9 (5%)

Freezing Point / Range No data available **Melting Point / Range** No data available 103 °C / 219 °F **Boiling Point / Range Flash Point** No data available No data available Flammability (solid, gas) **Upper flammability limit** No data available Lower flammability limit No data available **Evaporation rate** No data available **Vapor Pressure** No data available No data available

Vapor Density
No data available
Specific Gravity
0.75 - 0.95
Water Solubility
Soluble in water
Solubility in other solvents
Partition coefficient: n-octanol/water
Autoignition Temperature
Decomposition Temperature
Viscosity
No data available
No data available
No data available
No data available

Explosive PropertiesNo information available
Oxidizing Properties
No information available

9.2. Other information

VOC Content (%) 8-13% Bulk Density48-55 lbs/ft3

10. Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Will Not Occur

10.4. Conditions to avoid

None anticipated

10.5. Incompatible materials

Strong oxidizers. Prolonged contact with aluminum. Contact with copper. Contact with iron.

10.6. Hazardous decomposition products

Oxides of nitrogen. Ammonia. Carbon monoxide and carbon dioxide.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Eye and skin contact.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity

Inhalation None known.

Eye ContactNon-irritating to rabbit's eye **Skin Contact**Not irritating to skin in rabbits.

Ingestion None known.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 0.1%

are chronic health hazards.

11.3 Toxicity data

Toxicology data for the components

TOXICOTOGY data for the	Oxicology data for the components				
Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Contains no hazardous	NA	No data available	No data available	No data available	
substances in					
concentrations above					
cut-off values according					
to the competent					
authority					

12. Ecological Information

12.1. Toxicity

Acute Fish Toxicity

LC50(48h) = 189 mg/L (Pimephales promelas)

Acute Crustaceans Toxicity:

LC50(48h) > 1400 mg/L (Daphnia magna)

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish		Toxicity to Invertebrates
				Microorganisms	
Contains no	NA	No information available	No information available	No information available	No information available
hazardous substances					
in concentrations					
above cut-off values					
according to the					
competent authority					

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Contains no hazardous substances in	NA	No information available
concentrations above cut-off values according to		
the competent authority		

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Contains no hazardous substances in	NA	No information available
concentrations above cut-off values according to		
the competent authority		

12.4. Mobility in soil

Substances	CAS Number	Mobility
Contains no hazardous substances in concentrations	NA	No information available
above cut-off values according to the competent authority		

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

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

Contaminated Packaging Follow all applicable national or local regulations.

14. Transport Information

US DOT

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

Canadian TDG

UN Number Not restricted
UN proper shipping name:
Transport Hazard Class(es):
Packing Group:
Not applicable
Not applicable
Not applicable
Not applicable

IMDG/IMO

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

IATA/ICAO

UN Number
UN proper shipping name:
Transport Hazard Class(es):
Packing Group:
Not restricted
Not restricted
Not applicable
Not applicable
Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

Special Precautions for User None

15. Regulatory Information

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

TSCA Significant New Use Rules - S5A2

Substances	CAS Number	TSCA Significant New Use Rules - S5A2
above cut-off values according to the competent	NA	Not applicable
authority		

EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous
		Substances
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable

EPA SARA (311,312) Hazard Class

None

EPA SARA (313) Chemicals

Substances		Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Contains no hazardous substances in	NA	Not applicable	Not applicable
concentrations above cut-off values			
according to the competent authority			

EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Contains no hazardous substances in concentrations	NA	Not applicable
above cut-off values according to the competent		
authority		

EPA RCRA Hazardous Waste Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65

Substances	CAS Number	California Proposition 65
Contains no hazardous substances in concentrations	NA	Not applicable
above cut-off values according to the competent		
authority		

U.S. State Right-to-Know Regulations

<u> </u>				
Substances	CAS Number	MA Right-to-Know Law	NJ Right-to-Know Law	PA Right-to-Know Law
Contains no hazardous substances	NA	Not applicable	Not applicable	Not applicable
in concentrations above cut-off				
values according to the competent				
authority				

NFPA Ratings: Health 0, Flammability 1, Reactivity 0

HMIS Ratings: Health 0, Flammability 1, Physical Hazard 0, PPE: B

Canadian Regulations

Canadian Domestic Substances All components listed on inventory or are exempt. List (DSL)

16. Other information

Preparation Information

Prepared By

Chemical Stewardship
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e-mail: fdunexchem@halliburton.com

Revision Date: 29-Jun-2018

Reason for Revision

SDS sections updated:

1

Additional information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

Key or legend to abbreviations and acronyms used in the safety data sheet

bw – body weight

CAS - Chemical Abstracts Service

d - day

EC50 - Effective Concentration 50%

ErC50 – Effective Concentration growth rate 50%

h - hour

LC50 - Lethal Concentration 50%

LD50 - Lethal Dose 50%

LL50 - Lethal Loading 50%

mg/kg - milligram/kilogram

mg/L - milligram/liter

mg/m³ - milligram/cubic meter

mm - millimeter

mmHg - millimeter mercury

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OEL - Occupational Exposure Limit

PEL – Permissible Exposure Limit

ppm – parts per million

STEL - Short Term Exposure Limit

TWA - Time-Weighted Average

UN - United Nations

w/w - weight/weight

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

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End of Safety Data Sheet