HALLIBURTON

SAFETY DATA SHEET

Product Trade Name: POLYSELECT™ POWER SWELL

Revision Date: 30-Aug-2018 **Revision Number:** 1

1. Identification

1.1. Product Identifier

Product Trade Name: POLYSELECT™ POWER SWELL

Synonyms None
Chemical Family: Polymer
Internal ID Code HM008925

1.2 Recommended use and restrictions on use

Application:Lost Circulation MaterialUses advised againstNo 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

Baroid Fluid Services

Product Service Line of Halliburton Energy Services, Inc.

645 - 7th Ave SW Suite 1800

Calgary, AB T2P 4G8 Canada

Telephone: 1-403-231-9300

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

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Hazard Statements Not Hazardous

Precautionary Statements

Prevention None Response None None Storage Disposal None

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.

Wash with soap and water. Get medical attention if irritation persists. Skin 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

Carbon dioxide, dry chemical, foam.

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. Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

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.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Avoid creating and breathing dust. Slippery when wet. 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 creating or inhaling dust. Ensure adequate ventilation. Avoid contact with eyes, skin, or clothing. Wash hands after use. Launder contaminated clothing before reuse. Slippery when wet. 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 dry location. 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 A well ventilated area to control dust levels.

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 needed. But if significant exposures are possible then the following

respirator is recommended:

Dust/mist respirator. (N95, P2/P3)

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

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9.1. Information on basic physical and chemical properties

Physical State: Solid White Color

Odor: Odor No information available Odorless

Threshold:

Property Values

Remarks/ - Method

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

Specific Gravity 1.4

Water Solubility Insoluble in water Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available No data available **Autoignition Temperature Decomposition Temperature** No data available **Viscosity** No data available

Explosive Properties No information available **Oxidizing Properties** No information available

9.2. Other information

VOC Content (%) No data available **Bulk Density** 40-50 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.

10.6. Hazardous decomposition products

Oxides of nitrogen. Ammonia. Hydrocarbons. Carbon monoxide and carbon dioxide. In the event of oxygen depletion, hydrocyanic acid can be formed.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Eye or skin contact, inhalation. POLYSELECT™ POWER SWELL Revision Date: 30-Aug-2018

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity

Inhalation May cause mild respiratory irritation.

Eye Contact May cause mild eye irritation. **Skin Contact** May cause mild skin irritation.

Ingestion May cause abdominal pain, vomiting, nausea, and diarrhea.

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

| Toxicology 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

Substance Ecotoxicity Data

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

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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 methodsBury in a licensed landfill according to 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
UN proper shipping name:
Transport Hazard Class(es):
Packing Group:
Not restricted
Not restricted
Not applicable
Not applicable
Not applicable

IMDG/IMO

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

POLYSELECT™ POWER SWELL

| Substances | CAS Number | TSCA Significant New Use Rules - S5A2 |
|--|------------|---------------------------------------|
| Contains no hazardous substances in concentrations above cut-off values according to the competent | NA | Not applicable |
| authority | | |

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EPA SARA Title III Extremely Hazardous Substances

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

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

| 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 1, Flammability 1, Reactivity 0
HMIS Ratings: Health 1, Flammability 1, Reactivity 0

Canadian Regulations

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

16. Other information

Preparation Information

Prepared By Chemical Stewardship

Telephone: 1-281-871-6107

e-mail: fdunexchem@halliburton.com

Revision Date: 30-Aug-2018

Reason for Revision

Initial Release

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

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet