HALLIBURTON

SAFETY DATA SHEET

Product Trade Name: AQUA-CLEAR® PFD DRY

Revision Date: 13-Apr-2015 Revision Number: 4

1. Identification

1.1. Product Identifier

Product Trade Name: AQUA-CLEAR® PFD DRY

Synonyms: None

Chemical Family: Anionic Polymer Internal ID Code HM007108

1.2 Recommended use and restrictions on use

Application: Dispersant

Uses Advised Against No information available

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier Baroid Industrial Drilling Products

Product Service Line of Halliburton

P.O. Box 1675 Houston, TX 77251

Telephone: (281) 871-4613 or 1-877-379-7412

Emergency Telephone: (281) 575-5000

Prepared By Chemical Stewardship

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number

Emergency Telephone Number (281) 575-5000

2. Hazard(s) Identification

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

Combustible dust Combustible dust

2.2. Label Elements

Hazard Pictograms

Signal Word Warning

Hazard Statements

May form combustible dust concentrations in air.

Precautionary Statements

Prevention None

Response None

Storage None

Disposal None

Contains

SubstancesCAS NumberAnionic polyacrylamideProprietary

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Anionic polyacrylamide	Proprietary	60 - 100%	Combustible dust

The specific chemical identity of the composition has been withheld as proprietary. 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.

Skin Wash 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

Water fog, carbon dioxide, foam, dry chemical.

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

Decomposition in fire may produce toxic 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 Fire-Fighters

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. Avoid creating and breathing dust.

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

Do NOT spread spilled product with water. Scoop up and remove. Flush area with water.

7. Handling and storage

7.1. Precautions for Safe Handling

Handling Precautions

Slippery when wet. Avoid creating or inhaling dust.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store in a dry location. Store away from oxidizers. Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Store at temperatures between 40 and 90 F (5 and 35 C). Product has a shelf life of 36 months.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Anionic polyacrylamide	Proprietary	Not applicable	Not applicable

8.2 Appropriate engineering controls

Engineering Controls Use in a well ventilated area.

8.3 Individual protection measures, such as personal protective equipment

Respiratory Protection If engineering controls and work practices cannot keep exposure below

> occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or

other qualified professional.

Not normally needed. But if significant exposures are possible then the following

respirator is recommended:

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

Hand Protection Rubber gloves. **Skin Protection** Rubber apron.

Wear safety glasses or goggles to protect against exposure. Do NOT wear contact **Eye Protection**

lenses.

Other Precautions None known.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: Granules Color: White

Odor: Odorless Odor No information available

Threshold:

Property Values Remarks/ - Method

pH: 4-9 (5g/l)

Freezing Point/Range No information available.

Melting Point/Range No data available **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 No data available

Evaporation rate No data available **Vapor Pressure Vapor Density** No data available

Specific Gravity 8.0

Water Solubility Soluble in water Solubility in other solvents No data available

Partition coefficient: n-octanol/water 0

Autoignition Temperature No data available **Decomposition Temperature** No data available No data available Viscosity

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

9.2. Other information

VOC Content (%) No data available

Bulk Density 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

Carbon monoxide and carbon dioxide. Oxides of nitrogen.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Eye or skin contact, inhalation.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity

InhalationMay cause respiratory irritation.Eye ContactMay cause mild eye irritation.

Skin Contact Prolonged or repeated contact may cause slight skin irritation.

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

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Anionic polyacrylamide	Proprietary	No data available	No data available	No data available

12. Ecological Information

12.1. Toxicity

Ecotoxicity Effects

Product Ecotoxicity Data

No data available

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Anionic polyacrylamide	Proprietary	No information available	No information available	No information available	No information available

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Anionic polyacrylamide	Proprietary	No information available

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Anionic polyacrylamide	Proprietary	No information available

12.4. Mobility in soil

No information available

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

Disposal MethodBury 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:
UN Proper Shipping Name:
Transport Hazard Class(es):
Packing Group:
Environmental Hazards:
Not restricted
Not restricted
Not applicable
Not applicable

US DOT Bulk

DOT (Bulk) Not applicable

Canadian TDG

UN Number: Not restricted
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

IMDG/IMO

UN Number:
UN Proper Shipping Name:
Transport Hazard Class(es):
Packing Group:
Environmental Hazards:
Not restricted
Not restricted
Not applicable
Not applicable

IATA/ICAO

UN Number:
UN Proper Shipping Name:
Transport Hazard Class(es):
Packing Group:
Environmental Hazards:
Not restricted
Not restricted
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.

EPA SARA Title III Extremely

Hazardous Substances

Not applicable

EPA SARA (311,312) Hazard None

Class

EPA SARA (313) Chemicals This product does not contain a toxic chemical for routine annual "Toxic Chemical

Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund Reportable Spill Quantity

Not applicable.

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 The California Proposition 65 regulations apply to this product.

MA Right-to-Know Law One or more components listed.

NJ Right-to-Know Law One or more components listed.

PA Right-to-Know Law One or more components listed.

Canadian Regulations

Canadian DSL Inventory All components listed on inventory or are exempt.

16. Other information

Preparation Information

Prepared By

Chemical Stewardship Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

Revision Date: 13-Apr-2015

Reason for Revision Update to Format SECTION: 2

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

bw – body weight

CAS - Chemical Abstracts Service

EC50 - Effective Concentration 50%

ErC50 – Effective Concentration growth rate 50%

LC50 - Lethal Concentration 50%

LD50 - Lethal Dose 50%

LL50 - Lethal Loading 50%

mg/kg - milligram/kilogram

mg/L - milligram/liter

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

h - hour

mg/m³ - milligram/cubic meter

mm - millimeter

mmHg - millimeter mercury

w/w - weight/weight

d - day

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

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End of Safety Data Sheet
