HALLIBURTON

SAFETY DATA SHEET

Product Trade Name: **BARAFLOC®**

Revision Date: 13-Apr-2015 **Revision Number:** 15

1. Identification

1.1. Product Identifier

Product Trade Name: BARAFLOC®
Synonyms: None
Chemical Family: Polymer
Internal ID Code HM003507

1.2 Recommended use and restrictions on use

Application: Additive
Uses Advised Against No information available

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier
Baroid Fluid Services
Product Service Line of Halliburton
P.O. Box 1675
Houston, TX 77251
Telephone: (281) 871-4000
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

Substances	**CAS Number**
Polyacrylamide / polyacrlyate copolymer	Proprietary

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Polyacrylamide / polyacrlyate copolymer	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
Scoop up and remove.

7. Handling and storage

7.1. Precautions for Safe Handling
Handling Precautions
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 away from oxidizers. Store in a dry location.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Polyacrylamide / polyacrlyate copolymer	Proprietary	Not applicable	Not applicable

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
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

9.1. Information on basic physical and chemical properties
Physical State: Solid
Color: White
Odor: Mild
Odor Threshold: No information available

Property	Values	Remarks/ - Method
pH:	7-8	
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
Evaporation rate	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	No data available
Water Solubility	Soluble in water
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	No data available
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	45 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.

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

Inhalation	May cause mild respiratory irritation.
Eye Contact	May cause mild eye irritation.
Skin Contact	None known.
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
Polyacrylamide / polyacrlyate copolymer	Proprietary	> 5000 mg/kg	No data available	No data available

Substances	CAS Number	Skin corrosion/irritation
Polyacrylamide / polyacrlyate copolymer		No information available.

Substances	CAS Number	Eye damage/irritation
Polyacrylamide / polyacrlyate copolymer		No information available.

Substances	CAS Number	Skin Sensitization
Polyacrylamide / polyacrlyate copolymer		No information available

Substances	CAS Number	Respiratory Sensitization
Polyacrylamide / polyacrlyate copolymer		No information available

Substances	CAS Number	Mutagenic Effects
Polyacrylamide / polyacrlyate copolymer		No information available

Substances	CAS Number	Carcinogenic Effects
Polyacrylamide / polyacrlyate copolymer		No information available.

Substances	CAS Number	Reproductive toxicity
Polyacrylamide / polyacrlyate copolymer		No information available

Substances	CAS Number	STOT - single exposure
Polyacrylamide / polyacrlyate copolymer		No information available

Substances	CAS Number	STOT - repeated exposure
Polyacrylamide / polyacrlyate copolymer		No information available

Substances	CAS Number	Aspiration hazard
Polyacrylamide / polyacrlyate copolymer		No information 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
Polyacrylamide / polyacrlyate copolymer	Proprietary	EC50 (72) 4310 mg/L (Skeletonema costatum)	TLM96 > 100 mg/L (Lepomis macrochirus) TLM96 >100 ppm (Oncorhynchus mykiss) LC50 (96h) 9051 mg/L (Scophthalmus maximus)	No information available	TLM48 2202 mg/L (Acartia tonsa)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Polyacrylamide / polyacrlyate copolymer	Proprietary	No information available

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Polyacrylamide / polyacrlyate copolymer	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 Method Bury 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

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: 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: Not restricted
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: 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 Class None

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 All components listed do not apply to the California Proposition 65 Regulation.

MA Right-to-Know Law Does not apply.

NJ Right-to-Know Law Does not apply.

PA Right-to-Know Law Does not apply.

Canadian Regulations

Canadian DSL Inventory Product contains one or more components not listed on the inventory.

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/m^3 - milligram/cubic meter
mm - millimeter
mmHg - millimeter mercury
w/w - weight/weight
d - day

Key literature references and sources for data
www.ChemADVISOR.com/

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End of Safety Data Sheet