HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: POLY-BORETM

Revision Date: 09-Jul-2012

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: POLY-BORETM

Synonyms:NoneChemical Family:PolymerApplication:Additive

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 Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

SubstancesCAS NumberPERCENTACGIH TLV-TWAOSHA PEL-TWAAnionic polyacrlyamidePROPRIETARY60 - 100%Not applicableNot applicable

3. HAZARDS IDENTIFICATION

Hazard Overview No significant hazards expected.

4. FIRST AID MEASURES

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

develops or if breathing becomes difficult.

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

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

and get medical attention if irritation persists.

Ingestion Under normal conditions, first aid procedures are not required.

Notes to Physician Not Applicable

FIRE FIGHTING MEASURES

Flash Point/Range (F): Not Determined Flash Point/Range (C): Not Determined **Flash Point Method:** Not Determined **Autoignition Temperature (F):** Not Determined **Autoignition Temperature (C):** Not Determined Flammability Limits in Air - Lower (%): Not Determined Flammability Limits in Air - Upper (%): Not Determined

Fire Extinguishing Media All standard firefighting media.

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.

Fire-Fighters

Special Protective Equipment for Full protective clothing and approved self-contained breathing apparatus required for

fire fighting personnel.

NFPA Ratings: Health 0, Flammability 1, Reactivity 0

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

ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Slippery when wet.

Environmental Precautionary

Measures

Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning /

Absorption

Scoop up and remove.

HANDLING AND STORAGE

Handling Precautions Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust. Slippery

when wet.

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 60 months.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Use in a well ventilated area. **Engineering Controls**

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

Physical State: Powder

Color: White to yellow Odor: Odorless PH: 7-9 (5%) Specific Gravity @ 20 C (Water=1): 0.75-0.95 Density @ 20 C (lbs./gallon): Not Determined

Bulk Density @ 20 C (lbs/ft3):48-55Boiling Point/Range (F):219Boiling Point/Range (C):103

Freezing Point/Range (F):

Freezing Point/Range (C):

Vapor Pressure @ 20 C (mmHg):

Vapor Density (Air=1):

Not Determined

Not Determined

Not Determined

Percent Volatiles: 8-13

Evaporation Rate (Butyl Acetate=1): Not Determined

Solubility in Water (g/100ml): Soluble

Solubility in Solvents (g/100ml):

VOCs (lbs./gallon):

Viscosity, Dynamic @ 20 C (centipoise):

Viscosity, Kinematic @ 20 C (centistokes):

Partition Coefficient/n-Octanol/Water:

Molecular Weight (g/mole):

Not Determined

Not Determined

10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid None anticipated

Incompatibility (Materials to

Avoid)

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

with iron.

Hazardous Decomposition

Products

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

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye and skin contact.

Inhalation None known.

Skin Contact Not irritating to skin in rabbits.

Eye Contact Non-irritating to rabbit's eye

Ingestion None known

Aggravated Medical Conditions None known.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 1% are

chronic health hazards.

Other Information None known.

Toxicity Tests

Oral Toxicity: Not determined

Dermal Toxicity: Not determined

Inhalation Toxicity: Not determined

Primary Irritation Effect: Not determined

Carcinogenicity Not determined

Genotoxicity: Not determined

Reproductive /

Not determined

Developmental Toxicity:

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Not determined

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: LC50: (96 hour) 180 mg/l (Lepomis macrochirus)

TLM96: 130 mg/l (Oncorhynchus mykiss)

Acute Crustaceans Toxicity: Not determined Acute Algae Toxicity: Not determined

Chemical Fate Information Not determined

Other Information Not applicable

13. DISPOSAL CONSIDERATIONS

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

Contaminated Packaging Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

DOT

Not restricted

Canadian TDG

Not restricted

ADR

Not restricted

Air Transportation

ICAO/IATA

Not restricted

Sea Transportation

IMDG

Not restricted

Other Transportation Information

Labels: 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

All components listed on inventory or are exempt.

WHMIS Hazard Class

Un-Controlled

16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS

Not applicable

Additional Information

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

representative.

For questions about the Material Safety Data Sheet for this or other Halliburton

products, contact Chemical Compliance at 1-580-251-4335.

Disclaimer Statement

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END OF MSDS