HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: **DEEP-TREAT™**

Revision Date: 07-Jan-2015

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: DEEP-TREAT™

Synonyms: None
Chemical Family: Sulfonate
Application: Thinner

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

Substances	CAS Number	PERCENT (w/w)	ACGIH TLV-TWA	OSHA PEL-TWA
Sulfonic acid salt	Proprietary	60 - 100%	Not applicable	Not applicable

3. HAZARDS IDENTIFICATION

Hazard Overview May cause eye and skin irritation. May be harmful if swallowed.

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 Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek

medical attention. Never give anything by mouth to an unconscious person.

Notes to Physician Not Applicable

5. FIRE FIGHTING MEASURES

Flash Point/Range (F): Not Determined Min: > 200 Flash Point/Range (C): Not Determined Min: > 93

Flash Point Method: PMCC

Autoignition Temperature (F):

Autoignition Temperature (C):

Flammability Limits in Air - Lower (%):

Not Determined

Not Determined

Not Determined

Not Determined

Not Determined

Fire Extinguishing Media Water fog, carbon dioxide, foam, dry chemical.

Special Exposure Hazards Decomposition in fire may produce toxic gases.

Special Protective Equipment

for Fire-Fighters

Full protective clothing and approved self-contained breathing apparatus required

for fire fighting personnel.

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

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary

Measures

Use appropriate protective equipment. Avoid creating and breathing dust.

Environmental Precautionary

Measures

Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning /

Absorption

Scoop up and remove.

7. HANDLING AND STORAGE

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

Storage Information Store away from oxidizers. Store in a cool, dry location. Product has a shelf life of

24 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls A well ventilated area to control dust levels.

Respiratory Protection 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

Physical State: Powder

Color: Cream
DEEP-TREAT™

Page 2 of 6

Odor: Odorless pH: 6.5-8.7 Specific Gravity @ 20 C (Water=1): 1.5

Density @ 20 C (lbs./gallon): Not Determined

Bulk Density @ 20 C (lbs/ft3): 27 - 33

Boiling Point/Range (F):

Boiling Point/Range (C):

Freezing Point/Range (F):

Freezing Point/Range (C):

Not Determined
Not Determined
Not Determined
Not Determined

Vapor Pressure @ 20 C (mmHg): < 1

Vapor Density (Air=1): Not Determined **Percent Volatiles:** Not Determined Evaporation Rate (Butyl Acetate=1): Not Determined Solubility in Water (g/100ml): Partially soluble Solubility in Solvents (g/100ml): Not Determined VOCs (lbs./gallon): Not Determined Viscosity, Dynamic @ 20 C (centipoise): Not Determined Viscosity, Kinematic @ 20 C (centistokes): Not Determined Partition Coefficient/n-Octanol/Water: Not Determined Molecular Weight (g/mole): Not Determined

10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid None known.

Incompatibility (Materials to

Avoid)

Strong oxidizers.

Hazardous Decomposition

Products

Oxides of sulfur. Carbon monoxide and carbon dioxide.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Sympotoms related to exposure

Acute Toxicity

InhalationMay cause respiratory irritation.Eye ContactMay cause eye irritationSkin ContactMay cause skin irritation.

Ingestion Irritation of the mouth, throat, and stomach.

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

health hazards.

Toxicology data for the components

CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Proprietary	438 mg/kg (Rat) 1080 mg/kg (Rat) (similar	No data available	No data available
		roprietary 438 mg/kg (Rat)	droprietary 438 mg/kg (Rat) No data available 1080 mg/kg (Rat) (similar

12. ECOLOGICAL INFORMATION

Ecotoxicological Information

Ecotoxicity Product

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

Ecotoxicity Substance

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Sulfonic acid salt	Proprietary	No information available	LC50(96h): 10.8 mg/L (Oncorhynchus mykiss) LC50(96h): 7.133 mg/L (Onocorhynchus kisutch) NOEC(28d): 1 mg/L (Lepomis macrochirus) (similar substance) NOEC(72d): 0.23 mg/L (Salmo gairdneri)	No information available	EC50(48): 6.3 - 7.5 mg/L (Daphnia magna) NOEC(21d): 1.18 mg/L (Daphnia magna) (similar substance)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Sulfonic acid salt	Proprietary	No information available

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Sulfonic acid salt	Proprietary	No information available

12.4. Mobility in soil

No information available

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

13. DISPOSAL CONSIDERATIONS

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 Not restricted Transport Hazard Class(es): Packing Group: Not applicable

US DOT Bulk

DOT (Bulk)UN3077, Environmentally Hazardous Substance, Solid, N.O.S., 9, III

(Contains Sodium dodecylbenzene sulfonate), RQ (Sodium dodecylbenzene

sulfonate) 454 KG

Canadian TDG ul0

UN Number:
UN Proper Shipping Name:
Transport Hazard Class(es):
Packing Group:

Not restricted
Not restricted
Not applicable
Not applicable

IMDG/IMO

UN Number:
UN Proper Shipping Name:
Transport Hazard Class(es):
Packing Group:

Not restricted
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

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

Acute Health Hazard

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

EPA Reportable Spill Quantity is 1000 Pounds based on Sodium dodecylbenzene

sulfonate (CAS: 25155-30-0)

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 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.

WHMIS Hazard Class D2B Toxic Materials

16. OTHER INFORMATION

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

Not applicable

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 Compliance at 1-580-251-4335.

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sole responsibility of the user.

END OF MSDS