HALLIBURTON

SAFETY DATA SHEET DRILTREAT®

Product Trade Name:

Revision Date: 18-Apr-2019

Revision Number: 29

1. Identification

1.1. Product Identifier	
Product Trade Name:	DRILTREAT®
Synonyms	None
Chemical Family:	Lipid
Internal ID Code	HM003623

1.2 Recommended use and restrictions on useApplication:Oil-wetting AgentUses 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

Halliburton Group Canada 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 (accessible 24 hours a day / 7 days a week) 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
Hazard Statements	Not Hazardous

Precautionary Statements

Prevention	None
Response	None
Storage	None
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 concentrations above cut-off values	NA	60 - 100%	Not classified
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 ai	measures
Inhalation	Linder normal conditions, first aid procedures are not required

Under normal conditions, first aid procedures are not required.
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.
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 neededNotes to PhysicianTreat 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 in a fire

Decomposition in fire may produce harmful gases.

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.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. 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

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

7. Handling and storage

7.1. Precautions for safe handling

Handling Precautions

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Ensure adequate ventilation. Wash hands after use. Launder contaminated clothing before reuse. 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. 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
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	Use in a well ventilated area.
8.3 Individual protection measured	res, such as personal protective equipment
Personal Protective Equipment	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. 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.
Hand Protection Skin Protection Eye Protection Other Precautions	Normal work gloves. Normal work coveralls. Wear safety glasses or goggles to protect against exposure. None known.

9. Physical and Chemical Properties

9.1. Information on basic phy	sical and chemical prop	erties	
Physical State: Liquid		Color	Amber
Odor: Bean		Odor	No information available
		Threshold:	
Descent			
Property Demostly (Mathead		Values	
Remarks/ - Method		C 4 7	
pH:		6.4-7	
Freezing Point / Range		0 °C / 32 °F	L-
Melting Point / Range		No data availab	-
Pour Point / Range		No data availab	-
Boiling Point / Range		No data availab	-
Flash Point		204 °C / 400	· · · ·
Flammability (solid, gas)		No data availab	-
Upper flammability limit		No data availab	-
Lower flammability limit		No data availab	-
Evaporation rate		No data availab	le
Vapor Pressure		No data availab	le
Vapor Density		No data availab	le
Specific Gravity		1.03	
Water Solubility		Dispersible	
Solubility in other solvents		No data availab	le
Partition coefficient: n-octane	ol/water	No data availab	le
Autoignition Temperature		No data availab	le
Decomposition Temperature		No data availab	le
Viscosity		No data availab	le
Explosive Properties		No information a	available
Oxidizing Properties		No information a	available
9.2. Other information			
VOC Content (%)		0%	
Liquid Density		8.58 lbs/gal	

10. Stability and Reactivity

<u>10.1. Reactivity</u> 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.

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	None known.
Eye Contact	None known.
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

Dermal LC50 Inhalation
available No data available

12. Ecological Information

12.1. Toxicity

Substance Ecotoxicity Data

	<u>July Dutu</u>				
Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to	Toxicity to Invertebrates
				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 concentrations above cut-off values according to	NA	No information available
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		

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 methods	Disposal should be made in accordance with 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 Not applicable
Canadian TDG UN Number UN proper shipping name: Transport Hazard Class(es): Packing Group: Environmental Hazards:	Not restricted Not restricted Not applicable Not applicable 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 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 Not applicable

<u>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</u> Not applicable <u>Special Precautions for User</u> None

15. Regulatory Information

US Regulations

US TSCA Inventory

All components listed on inventory or are exempt.

TSCA Significant New Use Rules - S5A2

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

EPA SARA Title III Extremely Hazardous Substances

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

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 concentrations above cut-off values according to the competent authority	NA	Not applicable	Not applicable

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 in concentrations above cut-off values according to the competent authority	NA	Not applicable	Not applicable	Not applicable

NFPA Ratings:	Health 0, Fl	lammability 0,	Reactivity 0
HMIS Ratings:	Health 0, Fl	lammability 0,	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:	18-Apr-2019

Reason for Revision

SDS sections updated:

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/ NZ CCID

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End of Safety Data Sheet