HALLIBURTON

SAFETY DATA SHEET

Product Trade Name: BARO-LUBE™ GOLD SEAL

Revision Date: 30-Apr-2015 Revision Number: 19

1. Identification

1.1. Product Identifier

Product Trade Name: BARO-LUBE™ GOLD SEAL

Synonyms: None
Chemical Family: Lipid
Internal ID Code HM003554

1.2 Recommended use and restrictions on use

Application: Lubricant

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

Skin Corrosion / Irritation	Category 2 - (H315)
Serious Eye Damage / Eye Irritation	Category 2 - (H319)

2.2. Label Elements

Hazard Pictograms



Signal Word Warning

Hazard Statements H315 - Causes skin irritation

H319 - Causes serious eye irritation

Precautionary Statements

Prevention P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/eye protection/face protection

Response P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P332 + P313 - If skin irritation occurs: Get medical advice/attention P362 - Take off contaminated clothing and wash before reuse

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

Storage None

Disposal None

Contains

SubstancesCAS NumberPolyoxylated Alkly Phosphate EsterProprietary

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Polyoxylated Alkly Phosphate Ester	Proprietary	1 - 5%	Skin Corr. 1B (H314)
			Eye Corr. 1 (H318)

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. First-Aid Measures

4.1. Description of first aid measures

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

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

minutes and get medical attention if irritation persists.

SkinWash 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

Causes eye irritation Causes skin irritation.

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.

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.

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.

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 12 months.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Polyoxylated Alkly Phosphate Ester	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

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 ProtectionSkin Protection
Normal work gloves.
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: Liquid Color: Amber

Odor: Mild Odor No information available

Threshold:

<u>Property</u> <u>Values</u>

Remarks/ - Method

pH: 4.5- 5.5 (5%)

Freezing Point/Range

Melting Point/Range

No information available.

No data available

No data available

Flash Point > 93 °C / > 200 °F PMCC

Flammability (solid, gas)
upper flammability limit
lower flammability limit
No data available
No data available
No data available
Vapor Pressure
Vapor Density
No data available
No data available
No data available

Specific Gravity 0.936

Water Solubility

Solubility in other solvents

Partition coefficient: n-octanol/water

Autoignition Temperature

Decomposition Temperature

Viscosity

No data available

No information available

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

9.2. Other information

VOC Content (%) No data available

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 sulfur. 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 Skin ContactCauses eye irritation.
Causes skin irritation.

Ingestion May be harmful if swallowed.

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

			,
	LD50 Oral	LD50 Dermal	LC50 Inhalation
Proprietary	No data available	No data available	No data available
CAS Number	Skin corrosion/irritation		
	Causes burns		
CAS Number	Eye damage/irritation		
	Causes burns		
CAS Number	Skin Sensitization		
CAS Number			
	No information available		
	<u> </u>		
CAS Number			
	No information available		
CAS Number	Carcinogenic Effects		
Orto Itamboi			
	Tro micrimation available.		
CAS Number			
	No information available		
	<u> </u>		
CAS Number	STOT - single exposure		
	No information available		
CAS Number	STOT - reneated exposure		
55			
	CAS Number CAS Number	Proprietary No data available	CAS Number LD50 Oral LD50 Dermal Proprietary No data available No data available CAS Number Skin corrosion/irritation Causes burns CAS Number Eye damage/irritation Causes burns CAS Number Skin Sensitization No information available CAS Number Respiratory Sensitization No information available CAS Number Mutagenic Effects No information available CAS Number Carcinogenic Effects No information available CAS Number Reproductive toxicity No information available CAS Number STOT - single exposure No information available CAS Number STOT - repeated exposure No information available

Substances	CAS Number	Aspiration hazard
Polyoxylated Alkly		No information available
Phosphate Ester		

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12. Ecological Information

12.1. Toxicity

Ecotoxicity Effects

Product Ecotoxicity Data

No data available

Substance Ecotoxicity Data

Gabotanio Ecotoxio	oity Data				
Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to	Toxicity to Invertebrates
				Microorganisms	
, ., .,	Proprietary	No information available	No information available	No information available	No information available
Phosphate Ester					

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Polyoxylated Alkly Phosphate Ester	Proprietary	No information available

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Polyoxylated Alkly Phosphate Ester	Proprietary	No information available

12.4. Mobility in soil

Substances	Mobility
Polyoxylated Alkly Phosphate Ester	No information available

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

Disposal MethodDisposal 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: 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 Not applicable **Packing Group:** Not applicable **Environmental Hazards:**

IMDG/IMO

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

IATA/ICAO

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

Acute Health Hazard

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

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.

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

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: 30-Apr-2015

Reason for Revision SDS sections updated:

> 2 11

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

mmHa - millimeter mercury

w/w - weight/weight

d - day

Key literature references and sources for data

www.ChemADVISOR.com/ **OSHA**

ECHA C&L

Disclaimer Statement

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End of Safety Data Sheet