

## SAFETY DATA SHEET

**Product Trade Name:** QUIK-FOAM® HP

**Revision Date:** 11-Jun-2020

**Revision Number:** 1

### 1. Identification

#### 1.1. Product Identifier

**Product Trade Name:** QUIK-FOAM® HP  
**Synonyms:** None  
**Chemical Family:** Blend  
**Internal ID Code:** HM009405

#### 1.2 Recommended use and restrictions on use

**Application:** Foaming Agent  
**Uses advised against:** No information available

#### 1.3 Manufacturer's Name and Contact Details

##### Manufacturer/Supplier

Baroid Industrial Drilling Products  
Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4613 or 1-877-379-7412

Baroid Industrial Drilling Products  
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

Skin Corrosion / Irritation	Category 2 - H315
Serious Eye Damage/Irritation	Category 1 - H318
Acute Aquatic Toxicity	Category 2 - H401
Chronic Aquatic Toxicity	Category 3 - H412
Flammable liquids.	Category 3 - H226

#### 2.2. Label Elements

**Hazard Pictograms**



**Signal Word:** Danger

**Hazard Statements**  
 H226 - Flammable liquid and vapor  
 H315 - Causes skin irritation  
 H318 - Causes serious eye damage  
 H401 - Toxic to aquatic life  
 H412 - Harmful to aquatic life with long lasting effects

**Precautionary Statements**

**Prevention**  
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P233 - Keep container tightly closed  
 P240 - Ground and bond container and receiving equipment.  
 P241 - Use explosion-proof electrical/ventilating/lighting/equipment  
 P242 - Use only non-sparking tools  
 P243 - Take action to prevent static discharges.  
 P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P273 - Avoid release to the environment

**Response**  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
 P362 + P364 - 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  
 P310 - Immediately call a POISON CENTER or doctor/physician  
 P370 + P378 - In case of fire: Use CO2, dry chemical, or foam

**Storage**  
 P403 + P235 - Store in a well-ventilated place. Keep cool

**Disposal**  
 P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

**2.3 Hazards not otherwise classified**

None known

**3. Composition/information on Ingredients**

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Ammonium Salt of Ethoxylated Alcohol Sulfate	Proprietary	30 - 60%	Skin Irrit. 2 (H315) Eye Corr. 1 (H318) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412)

Isopropanol	67-63-0	10 - 30%	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225)
Surfactant	Proprietary	10 - 30%	Skin Irrit. 2 (H315) Eye Corr. 1 (H318) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412)
Ethanol	64-17-5	5 - 10%	Eye Irrit. 2A (H319) Flam. Liq. 2 (H225)
Ammonium salt	Proprietary	1 - 5%	Acute Tox. 4 (H302) Skin Corr. 1 (H314) Eye Corr. 1 (H318) STOT SE 3 (H335) Aquatic Acute 2 (H401)

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** Immediately flush eyes with large amounts of water for at least 30 minutes. Seek prompt medical attention.

**Skin** In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.

**Ingestion** Rinse mouth with water many times. Get medical attention, if symptoms occur

**4.2 Most important symptoms/effects, acute and delayed**

Causes severe eye irritation which may damage tissue. 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**

Do NOT spray pool fires directly with water. A solid stream of water directed into hot burning liquid can cause splattering.

**5.2 Specific hazards arising from the substance or mixture**

**Special exposure hazards in a fire**

Decomposition in fire may produce harmful gases. Vapors are heavier than air and may accumulate in low areas. Vapors may travel along the ground to be ignited at distant locations.

**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**

Avoid contact with skin, eyes and clothing. Do not breathe dust, vapors or spray mist. Ensure adequate ventilation. Remove sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. 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**

Remove ignition sources and work with non-sparking tools. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**7. Handling and storage**

**7.1. Precautions for safe handling**

**Handling Precautions**

Ensure adequate ventilation. Use appropriate protective equipment. Remove sources of ignition. Ground and bond containers when transferring from one container to another. 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 in a cool well ventilated area. Store away from oxidizers. Keep from heat, sparks, and open flames. Keep container closed when not in use.

**8. Exposure Controls/Personal Protection**

**8.1 Occupational Exposure Limits**

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Ammonium Salt of Ethoxylated Alcohol Sulfate	Proprietary	Not applicable	Not applicable
Isopropanol	67-63-0	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup>	TWA: 200 ppm STEL: 400 ppm
Surfactant	Proprietary	Not applicable	Not applicable
Ethanol	64-17-5	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	STEL: 1000 ppm
Ammonium salt	Proprietary	Not applicable	Not applicable

**8.2 Appropriate engineering controls**

**Engineering Controls**

Ensure adequate ventilation, especially in confined areas

**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**

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. Organic vapor respirator.

**Hand Protection**

Impervious rubber gloves. Manufacturer's directions for use should be observed

**Skin Protection** because of great diversity of types.  
Wear impervious protective clothing, including boots, gloves, lab coat, apron, rain jacket, pants or coverall, as appropriate, to prevent skin contact.

**Eye Protection** Chemical goggles; also wear a face shield if splashing hazard exists.

**Other Precautions** Eyewash fountains and safety showers must be easily accessible.

**9. Physical and Chemical Properties**

**9.1. Information on basic physical and chemical properties**

**Physical State:** Liquid **Color** Light yellow  
**Odor:** Not determined **Odor** No information available  
**Threshold:**

<u>Property</u>	<u>Values</u>
<u>Remarks/ - Method</u>	
<b>pH:</b>	No data available
<b>Freezing Point / Range</b>	No data available
<b>Melting Point / Range</b>	No data available
<b>Pour Point / Range</b>	No data available
<b>Boiling Point / Range</b>	No data available
<b>Flash Point</b>	30 °C / 86 °F ASTM D7094
<b>Flammability (solid, gas)</b>	No data available
<b>Upper flammability limit</b>	No data available
<b>Lower flammability limit</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No data available
<b>Specific Gravity</b>	No data available
<b>Water Solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	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**  
Keep away from heat, sparks and flame.

**10.5. Incompatible materials**  
Strong oxidizers.

**10.6. Hazardous decomposition products**

Carbon oxides. Oxides of nitrogen. Oxides of sulfur.

**11. Toxicological Information**

**11.1 Information on likely routes of exposure**

**Principle Route of Exposure** Ingestion. Skin contact. Eye contact. Inhalation.

**11.2 Symptoms related to the physical, chemical and toxicological characteristics**

**Acute Toxicity**

**Inhalation** May cause mild respiratory irritation.  
**Eye Contact** Causes serious eye damage.  
**Skin Contact** Causes skin irritation.  
**Ingestion** May cause abdominal pain, vomiting, nausea, and diarrhea.

**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
Ammonium Salt of Ethoxylated Alcohol Sulfate	Proprietary	4100 mg/kg (Rat) (Similar substance)	>5000 mg/kg (Rabbit (Similar substance)	No data available
Isopropanol	67-63-0	4700 mg/kg-bw (rat)	12870 mg/kg-bw (rabbit)	72.6 mg/L (Rat, 4h, vapor)
Surfactant	Proprietary	> 2000 mg/kg (Rat) (similar substance)	> 2000 mg/kg (Rabbit) (similar substance)	No data available
Ethanol	64-17-5	7060 mg/kg (Rat) 10,470 mg/kg (Rat)	> 15,800 mg/kg (Rabbit) 17,100 mg/kg (Rabbit)	124.7 mg/L (Rat) 4h
Ammonium salt	Proprietary	1827 mg/kg (Rat)	500 mg/kg (Rabbits)	No data available

Substances	CAS Number	Skin corrosion/irritation
Ammonium Salt of Ethoxylated Alcohol Sulfate		Causes moderate skin irritation. (Rabbit) (similar substances)
Isopropanol	67-63-0	Non-irritating to the skin (Rabbit)
Surfactant		Skin, rabbit: Causes moderate skin irritation. (similar substances)
Ethanol	64-17-5	Not irritating to skin in rabbits.
Ammonium salt		Causes severe skin irritation with tissue destruction. (Rabbit) (similar substances)

Substances	CAS Number	Serious eye damage/irritation
Ammonium Salt of Ethoxylated Alcohol Sulfate		Causes severe eye irritation (Rabbit) (similar substances)
Isopropanol	67-63-0	Causes moderate eye irritation (Rabbit)
Surfactant		Causes severe eye irritation which may damage tissue.
Ethanol	64-17-5	Causes moderate eye irritation (Rabbit)
Ammonium salt		Causes severe eye irritation which may damage tissue. (Rabbit) (similar substances)

Substances	CAS Number	Skin Sensitization
Ammonium Salt of Ethoxylated Alcohol Sulfate		Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
Isopropanol	67-63-0	Did not cause sensitization on laboratory animals (guinea pig)
Surfactant		Did not cause sensitization on laboratory animals (similar substances)
Ethanol	64-17-5	Did not cause sensitization on laboratory animals
Ammonium salt		Did not cause sensitization on laboratory animals (guinea pig) (similar substances)

Substances	CAS Number	Respiratory Sensitization
Ammonium Salt of Ethoxylated Alcohol Sulfate		No information available

Isopropanol	67-63-0	No information available
Surfactant		No information available
Ethanol	64-17-5	Did not cause sensitization on laboratory animals
Ammonium salt		No information available

Substances	CAS Number	Mutagenic Effects
Ammonium Salt of Ethoxylated Alcohol Sulfate		In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)
Isopropanol	67-63-0	In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects.
Surfactant		In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)
Ethanol	64-17-5	Not regarded as mutagenic.
Ammonium salt		In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)

Substances	CAS Number	Carcinogenic Effects
Ammonium Salt of Ethoxylated Alcohol Sulfate		Did not show carcinogenic effects in animal experiments (similar substances)
Isopropanol	67-63-0	Did not show carcinogenic effects in animal experiments
Surfactant		Did not show carcinogenic effects in animal experiments (similar substances)
Ethanol	64-17-5	Did not show carcinogenic effects in animal experiments
Ammonium salt		Did not show carcinogenic effects in animal experiments (similar substances)

Substances	CAS Number	Reproductive toxicity
Ammonium Salt of Ethoxylated Alcohol Sulfate		Did not show teratogenic effects in animal experiments. (similar substances)
Isopropanol	67-63-0	Animal testing did not show any effects on fertility.
Surfactant		Did not show teratogenic effects in animal experiments. Not a confirmed reproductive toxicant. (similar substances)
Ethanol	64-17-5	Animal testing did not show any effects on fertility.
Ammonium salt		Did not show teratogenic effects in animal experiments. (similar substances)

Substances	CAS Number	STOT - single exposure
Ammonium Salt of Ethoxylated Alcohol Sulfate		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Isopropanol	67-63-0	May cause headache, dizziness, and other central nervous system effects.
Surfactant		No data of sufficient quality are available.
Ethanol	64-17-5	No significant toxicity observed in animal studies at concentration requiring classification.
Ammonium salt		May cause respiratory irritation. (similar substances)

Substances	CAS Number	STOT - repeated exposure
Ammonium Salt of Ethoxylated Alcohol Sulfate		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Isopropanol	67-63-0	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Surfactant		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Ethanol	64-17-5	No significant toxicity observed in animal studies at concentration requiring classification.
Ammonium salt		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)

Substances	CAS Number	Aspiration hazard
Ammonium Salt of Ethoxylated Alcohol Sulfate		Not applicable
Isopropanol	67-63-0	Not applicable
Surfactant		Not applicable
Ethanol	64-17-5	Not applicable
Ammonium salt		Not applicable

## 12. Ecological Information

### 12.1. Toxicity Ecotoxicity effects

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

**Substance Ecotoxicity Data**

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Ammonium Salt of Ethoxylated Alcohol Sulfate	Proprietary	EC50 (72h) 73.52 mg/L (Skeletonema costatum) ErC50 (72h) 32 mg/L (Selenstrum capricornutum) (similar substance) NOErC (72h) 9 mg/L (Selenastrum capricornutum) NOEC (72h) 32 mg/L (Skeletonema costatum)	LC50 (96h) 1 - 2.5 mg/L (Salmo trutta) (similar substance) LC50 (96h) 350 mg/L (Scophthalmus maximus) NOEC (30d) 0.88 mg/L (Pimephales promelas) (similar substance)	No information available	EC50 (48h) 1.17 mg/L (Daphnia magna) (similar substance) LC50 (96h) 232.5 mg/L (Acartia tonsa) NOEC (21d) 0.37 mg/L (Daphnia magna) (similar substance)
Isopropanol	67-63-0	EC50 (72h) > 1000 mg/L (Desmodesmus subspicatus) EC50 (7d) 1800 mg/L (meanextinction value)(Scenedesmus quadricauda)	LC50 (96h) 9640 mg/L (Pimephales promelas) LC50 (7d) 7060 mg/L (Poecilia reticulata)	TT (16h) 1050 mg/L (Pseudomonas putida)	EC50 (48 h)=2285 mg/L (Daphnia sp.) EC50 (24h) > 10,000 mg/L (Daphnia magna)
Surfactant	Proprietary	EC50 (5d) 101 mg/L (Selenastrum capricornutum) (similar substance)	NOEC (28d) 0.12 mg/L (Oncorhynchus mykiss) (similar substance)	EC50 (3h) > 1600 mg/L (similar substance)	EC50 (48h) 3.43 mg/L (Ceriodaphnia dubia) (similar substance) EC50 (24h) 21 mg/L (Daphnia magna) (similar substance) EC50 (96h) 5.7 mg/L (Daphnia magna) (similar substance) NOEC (7d) 0.34 mg/L (Ceriodaphnia dubia) (similar substance) NOEC (21d) 16.5 mg/L (Daphnia magna) (similar substance) NOEC (7d) 6.3 mg/L (Ceriodaphnia dubia) (similar substance)
Ethanol	64-17-5	No information available	LC50 > 100 mg/L (Pimephales promelas)	No information available	LC50 9268 - 14,221 mg/L (Daphnia magna) LC50 5012 mg/L (Ceriodaphnia dubia) NOEC 9.6 mg/L (Daphnia magna)
Ammonium salt	Proprietary	ErC50 (72h) 27 mg/L (Desmodesmus subspicatus) (similar substance)	LC50 (96h) 2.8 mg/L (Danio rerio) (similar substance)	No information available	EC50 (24h) 23 mg/L (Daphnia magna) (similar substance)

**12.2. Persistence and degradability**

Substances	CAS Number	Persistence and Degradability
Ammonium Salt of Ethoxylated Alcohol Sulfate	Proprietary	Readily biodegradable
Isopropanol	67-63-0	Readily biodegradable (53% @ 5d)
Surfactant	Proprietary	Readily biodegradable (similar substances)
Ethanol	64-17-5	No information available
Ammonium salt	Proprietary	(96% @ 28d)

**12.3. Bioaccumulative potential**

Substances	CAS Number	Bioaccumulation
Ammonium Salt of Ethoxylated Alcohol Sulfate	Proprietary	Log Pow = 0.7
Isopropanol	67-63-0	LogPow < 4.5
Surfactant	Proprietary	No information available



Ethanol	64-17-5	-0.32
Ammonium salt	Proprietary	Log Kow = 3.42

**12.4. Mobility in soil**

Substances	CAS Number	Mobility
Ammonium Salt of Ethoxylated Alcohol Sulfate	Proprietary	No information available
Isopropanol	67-63-0	No information available
Surfactant	Proprietary	No information available
Ethanol	64-17-5	No information available
Ammonium salt	Proprietary	No information available

**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** UN1993  
**UN proper shipping name:** Flammable Liquid, N.O.S. (Contains Isopropanol, Ethanol)  
**Transport Hazard Class(es):** 3  
**Packing Group:** III  
**Environmental Hazards:** Not applicable  
**Not Restricted when shipped in containers less than 119 gallons as authorized by 49 CFR 173.150(e)(1) and 49 CFR 173.150(f)(2).**

**Canadian TDG**

**UN Number** UN1993  
**UN proper shipping name:** Flammable Liquid, N.O.S. (Contains Isopropanol, Ethanol)  
**Transport Hazard Class(es):** 3  
**Packing Group:** III  
**Environmental Hazards:** Not applicable

**IMDG/IMO**

**UN Number** UN1993  
**UN proper shipping name:** Flammable Liquid, N.O.S. (Contains Isopropanol, Ethanol)  
**Transport Hazard Class(es):** 3  
**Packing Group:** III  
**Environmental Hazards:** Not applicable

**IATA/ICAO**

**UN Number** UN1993  
**UN proper shipping name:** Flammable Liquid, N.O.S. (Contains Isopropanol, Ethanol)  
**Transport Hazard Class(es):** 3  
**Packing Group:** III  
**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.

**TSCA Significant New Use Rules - S5A2**

Substances	CAS Number	TSCA Significant New Use Rules - S5A2	TSCA Section 5(E) Consent Orders
Ammonium Salt of Ethoxylated Alcohol Sulfate	Proprietary	Not applicable	Not applicable
Isopropanol	67-63-0	Not applicable	Not applicable
Surfactant	Proprietary	Not applicable	Not applicable
Ethanol	64-17-5	Not applicable	Not applicable
Ammonium salt	Proprietary	Not applicable	Not applicable

**EPA SARA Title III Extremely Hazardous Substances**

Substances	CAS Number	EPA SARA Title III Extremely Hazardous Substances
Ammonium Salt of Ethoxylated Alcohol Sulfate	Proprietary	Not applicable
Isopropanol	67-63-0	Not applicable
Surfactant	Proprietary	Not applicable
Ethanol	64-17-5	Not applicable
Ammonium salt	Proprietary	Not applicable

**EPA SARA (311,312) Hazard Class**

Flammable (gases, aerosols, liquids, or solids)  
 Skin Corrosion or Irritation  
 Serious eye damage or eye irritation

**EPA SARA (313) Chemicals**

Substances	CAS Number	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Ammonium Salt of Ethoxylated Alcohol Sulfate	Proprietary	Not applicable	Not applicable
Isopropanol	67-63-0	1.0%	Not applicable
Surfactant	Proprietary	Not applicable	Not applicable
Ethanol	64-17-5	Not applicable	Not applicable
Ammonium salt	Proprietary	Not applicable	Not applicable

**EPA CERCLA/Superfund Reportable Spill Quantity**

Substances	CAS Number	CERCLA RQ
Ammonium Salt of Ethoxylated Alcohol Sulfate	Proprietary	Not applicable
Isopropanol	67-63-0	Not applicable
Surfactant	Proprietary	Not applicable
Ethanol	64-17-5	Not applicable
Ammonium salt	Proprietary	Not applicable

**EPA RCRA Hazardous Waste Classification**

If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA, because of:

Ignitability D001

**California Proposition 65**

Substances	CAS Number	California Proposition 65
Ammonium Salt of Ethoxylated Alcohol Sulfate	Proprietary	Not applicable
Isopropanol	67-63-0	Not applicable
Surfactant	Proprietary	Not applicable
Ethanol	64-17-5	developmental toxicity carcinogen

Ammonium salt	Proprietary	Not applicable
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**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
Ammonium Salt of Ethoxylated Alcohol Sulfate	Proprietary	Not applicable	Not applicable	Not applicable
Isopropanol	67-63-0	Present	Present	Environmental hazard
Surfactant	Proprietary	Not applicable	Not applicable	Not applicable
Ethanol	64-17-5	Teratogen	Present	Present
Ammonium salt	Proprietary	Not applicable	Not applicable	Not applicable

**Canadian Regulations**

**Canadian Domestic Substances List (DSL)** All components listed on inventory or are exempt.

**16. Other information**

**Preparation Information**

**Prepared By** Chemical Stewardship  
 Telephone: 1-281-871-6107  
 e-mail: fdunexchem@halliburton.com

**Revision Date:** 11-Jun-2020

**Reason for Revision** Initial Release

**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/m<sup>3</sup> - 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/](http://www.ChemADVISOR.com/)

**Disclaimer Statement**

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**End of Safety Data Sheet**