

## SAFETY DATA SHEET

**Product Trade Name:** CFS™ - 969

**Revision Date:** 02-Apr-2019

**Revision Number:** 3

### 1. Identification

#### 1.1. Product Identifier

**Product Trade Name:** CFS™ - 969  
**Synonyms:** None  
**Chemical Family:** Blend  
**Internal ID Code:** HM008819

#### 1.2 Recommended use and restrictions on use

**Application:** Cleaner  
**Uses advised against:** No information available

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

##### Manufacturer/Supplier

Halliburton Energy Services, Inc.  
P.O. Box 1431  
Duncan, Oklahoma 73536-0431  
Telephone: 1-281-871-6107

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

Skin Corrosion / Irritation	Category 2 - H315
Serious Eye Damage/Irritation	Category 1 - H318
Skin Sensitization	Category 1 - H317
Acute Aquatic Toxicity	Category 2 - H401
Chronic Aquatic Toxicity	Category 2 - H411

#### 2.2. Label Elements

**Hazard Pictograms**

**Signal Word:**

Danger

**Hazard Statements**

H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H318 - Causes serious eye damage  
 H401 - Toxic to aquatic life  
 H411 - Toxic to aquatic life with long lasting effects

**Precautionary Statements****Prevention**

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
 P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P272 - Contaminated work clothing should not be allowed out of the workplace  
 P273 - Avoid release to the environment  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection

**Response**

P302 + P352 - IF ON SKIN: Wash with plenty of water.  
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention  
 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  
 P391 - Collect spillage

**Storage**

None

**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
Hydrotreated distillate	Proprietary	30 - 60%	Asp. Tox. 1 (H304)
Hexane, 1,1'-oxybis-	112-58-3	10 - 30%	Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)
Modified carbohydrate	Proprietary	10 - 30%	Eye Corr. 1 (H318) Aquatic Acute 3 (H402) Combustible Dust
Ethylene glycol monobutyl ether	111-76-2	10 - 30%	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Flam. Liq. 4 (H227)
Orange, sweet, extract	8028-48-6	5 - 10%	Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Flam. Liq. 3 (H226)

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

## 4. First Aid Measures

### 4.1. Description of first aid measures

<b>Inhalation</b>	Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.
<b>Eyes</b>	Immediately flush eyes with large amounts of water for at least 30 minutes. Seek prompt medical attention.
<b>Skin</b>	In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.
<b>Ingestion</b>	Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration. Rinse mouth. Never give anything by mouth to an unconscious person.

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

Causes severe eye irritation which may damage tissue. Causes skin irritation. May cause allergic skin reaction.

### 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.

### 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. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. 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

Dike far ahead of liquid spill for later disposal. Soak up condensate with inert absorbent material and collect in ventilated waste container for disposal

## 7. Handling and storage

**7.1. Precautions for safe handling**

**Handling Precautions**

Use appropriate protective equipment. Ensure adequate ventilation. 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**

Keep containers tightly closed in a cool, well ventilated place

**8. Exposure Controls/Personal Protection**

**8.1 Occupational Exposure Limits**

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Hydrotreated distillate	Proprietary	Not applicable	Not applicable
Hexane, 1,1'-oxybis-	112-58-3	Not applicable	Not applicable
Modified carbohydrate	Proprietary	Not applicable	Not applicable
Ethylene glycol monobutyl ether	111-76-2	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup>	TWA: 20 ppm
Orange, sweet, extract	8028-48-6	Not applicable	Not applicable

**8.2 Appropriate engineering controls**

**Engineering Controls**

Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits. 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**

Use gloves which are suitable for the chemicals present in this product as well as other environmental factors in the workplace.

**Skin Protection**

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**

Colorless

**Odor:** Slight Citrus

**Odor**

No information available

**Threshold:**

Property  
Remarks/ - Method

Values

pH:	7-8
Freezing Point / Range	No data available
Melting Point / Range	No data available
Pour Point / Range	No data available
Boiling Point / Range	No data available
Flash Point	> 61 °C (Closed cup)
Flammability (solid, gas)	No data available
Upper flammability limit	No data available
Lower flammability limit	No data available
Evaporation rate	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	0.855 - 0.875
Water Solubility	No data available
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No 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. Strong acids. Strong alkalis.

**10.6. Hazardous decomposition products**

Carbon oxides.

**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 severe eye irritation which may damage tissue.

**Skin Contact**

Causes skin irritation. May cause an allergic skin reaction.

**Ingestion**

Aspiration can be a hazard if this material is 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

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrotreated distillate	Proprietary	>5000 mg/kg-bw (rat) (similar substance)	>2000 mg/kg-bw (rabbit) (similar substance)	>5.2 mg/L (rat, 4 h, vapor) (similar substance)
Hexane, 1,1'-oxybis-	112-58-3	>2000 mg/kg-bw (rat) (similar substances)	>2000 mg/kg-bw (rat) (similar substances)	No data available
Modified carbohydrate	Proprietary	> 2000 mg/kg (Rat) > 5000 mg/kg (Rat) (similar substance)	>2000 mg/kg-bw (rat) (similar substances)	No data available
Ethylene glycol monobutyl ether	111-76-2	1414 mg/kg-bw (guinea pig)	>2000 mg/kg (Rabbit)	~2.0 mg/L LC50 (rat, vapor, 4h)
Orange, sweet, extract	8028-48-6	> 5000 mg/kg (Rat)(similar substance)	>5000 mg/kg (Rabbits) (Similar substance)	No data available

Substances	CAS Number	Skin corrosion/irritation
Hydrotreated distillate		Non-irritating to the skin (similar substances)
Hexane, 1,1'-oxybis-	112-58-3	Mild skin irritation (Rabbit) (similar substances) Causes skin irritation.
Modified carbohydrate		Not irritating to skin in rabbits. (similar substances)
Ethylene glycol monobutyl ether	111-76-2	Skin, rabbit: Causes moderate skin irritation.
Orange, sweet, extract	8028-48-6	Skin, rabbit: Causes moderate skin irritation.

Substances	CAS Number	Serious eye damage/irritation
Hydrotreated distillate		Non-irritating to rabbit's eye (similar substances)
Hexane, 1,1'-oxybis-	112-58-3	Non-irritating to the eye (Rabbit) (similar substances) Non-irritating to rabbit's eye
Modified carbohydrate		Causes severe eye irritation (Rabbit) (similar substances)
Ethylene glycol monobutyl ether	111-76-2	Eye, rabbit: Causes moderate eye irritation
Orange, sweet, extract	8028-48-6	Non-irritating to rabbit's eye

Substances	CAS Number	Skin Sensitization
Hydrotreated distillate		Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
Hexane, 1,1'-oxybis-	112-58-3	Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
Modified carbohydrate		Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
Ethylene glycol monobutyl ether	111-76-2	Did not cause sensitization on laboratory animals (guinea pig)
Orange, sweet, extract	8028-48-6	May cause sensitization of susceptible persons (similar substances)

Substances	CAS Number	Respiratory Sensitization
Hydrotreated distillate		Based on available data, the classification criteria are not met.
Hexane, 1,1'-oxybis-	112-58-3	No information available
Modified carbohydrate		No information available
Ethylene glycol monobutyl ether	111-76-2	No information available
Orange, sweet, extract	8028-48-6	No information available

Substances	CAS Number	Mutagenic Effects
Hydrotreated distillate		In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)
Hexane, 1,1'-oxybis-	112-58-3	In vitro tests did not show mutagenic effects (similar substances)
Modified carbohydrate		In vitro tests did not show mutagenic effects (similar substances)
Ethylene glycol monobutyl ether	111-76-2	In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects.
Orange, sweet, extract	8028-48-6	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)

Substances	CAS Number	Carcinogenic Effects
Hydrotreated distillate		Did not show carcinogenic effects in animal experiments (similar substances)

Hexane, 1,1'-oxybis-	112-58-3	No information available
Modified carbohydrate		Not regarded as carcinogenic. (similar substances)
Ethylene glycol monobutyl ether	111-76-2	Not regarded as carcinogenic.
Orange, sweet, extract	8028-48-6	Did not show carcinogenic effects in animal experiments (similar substances)

Substances	CAS Number	Reproductive toxicity
Hydrotreated distillate		Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)
Hexane, 1,1'-oxybis-	112-58-3	Did not show teratogenic effects in animal experiments. (similar substances)
Modified carbohydrate		Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)
Ethylene glycol monobutyl ether	111-76-2	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.
Orange, sweet, extract	8028-48-6	Did not show teratogenic effects in animal experiments. (similar substances)

Substances	CAS Number	STOT - single exposure
Hydrotreated distillate		No significant toxicity observed in animal studies at concentration requiring classification.
Hexane, 1,1'-oxybis-	112-58-3	No information available
Modified carbohydrate		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Ethylene glycol monobutyl ether	111-76-2	No data of sufficient quality are available.
Orange, sweet, extract	8028-48-6	No information available

Substances	CAS Number	STOT - repeated exposure
Hydrotreated distillate		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Hexane, 1,1'-oxybis-	112-58-3	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Modified carbohydrate		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Ethylene glycol monobutyl ether	111-76-2	No data of sufficient quality are available.
Orange, sweet, extract	8028-48-6	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)

Substances	CAS Number	Aspiration hazard
Hydrotreated distillate		Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.
Hexane, 1,1'-oxybis-	112-58-3	Not applicable
Modified carbohydrate		Not applicable
Ethylene glycol monobutyl ether	111-76-2	Not applicable
Orange, sweet, extract	8028-48-6	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.

## 12. Ecological Information

### 12.1. Toxicity

#### Ecotoxicity effects

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

#### Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Hydrotreated distillate	Proprietary	ErL50(72 h)>10000 mg/L (Skeletonema costatum)	LC50(96 h)>10000 mg/L (Scophthalmus maximus) NOELR(28 d)>1000 mg/L (fish)	No information available	LC50(48 h)>10000 mg/L (Acartia tonsa) NOELR(21 d)=1000 mg/L (Daphnia magna)
Hexane, 1,1'-oxybis-	112-58-3	EC50(72 h)=0.562 mg/L (Algae) QSAR NOEC(96 h)=0.192 mg/L (Algae) QSAR	LC50(96 h)=0.324 mg/L (Fish) QSAR NOEC(30 d)=0.031 mg/L (Fish) QSAR	No information available	EC50(48 h)=0.194 mg/L (Daphnia magna) LC50(48 h)=0.242 mg/L (Daphnia magna) QSAR NOEC(21 d)=0.036 mg/L

Modified carbohydrate	Proprietary	EC50 (72h) 27.22 mg/L (Desmodemus subspicatus) EC50 (72h) 19.82 mg/L (Senastrum sp.)	LC50 (96h) 126 mg/L (Danio rerio) LC50 (96h) 96.64 mg/L (Scophthalmus maximus) NOEC (96h) 56mg/L (Scophthalmus maximus) NOEC (96h) >= 21 mg/L (Cyprinodon variegatus) NOEC (28d) 1.8 mg/L (Danio rerio) (similar substance)	EC50 (6h) > 560 mg/L (Pseudomonas putida, growth inhibition)	(Daphnia magna) EC50 (48h) >100 mg/L (Daphnia magna) EC50 (48h) 31.62 mg/L (Acartia tonsa) NOEC (21d) 1 mg/L (Daphnia magna) (similar substance)
Ethylene glycol monobutyl ether	111-76-2	EC50(72 h)=1840 mg/L (Pseudokirchneriella subcapitata)	LC50(96 h)=1474 mg/L (Oncorhynchus mykiss) NOAEC(21 d)>100 mg/L (Danio rerio)	No information available	EC50(48 h)=1800 mg/L (Daphnia magna) EC50(21 d)=297 mg/L (Daphnia magna)
Orange, sweet, extract	8028-48-6	No information available	LL50 (96h) 0.702 mg/L (Pimephales promelas) (similar substance)	No information available	EC50 (48h) 0.36 mg/L (Daphnia magna)(similar substance) NOEC (16d) = 0.115 mg/L (Daphnia magna or Daphnia pule)(similar substance)

## 12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Hydrotreated distillate	Proprietary	Readily biodegradable (68.1% @ 28d)
Hexane, 1,1'-oxybis-	112-58-3	Readily biodegradable (.?% @ 28d)
Modified carbohydrate	Proprietary	Readily biodegradable (100% @ 28d)
Ethylene glycol monobutyl ether	111-76-2	Readily biodegradable (90.4% @ 28d)
Orange, sweet, extract	8028-48-6	Readily biodegradable

## 12.3. Bioaccumulative potential

Substances	CAS Number	Bioaccumulation
Hydrotreated distillate	Proprietary	No information available
Hexane, 1,1'-oxybis-	112-58-3	Log Pow=4.98
Modified carbohydrate	Proprietary	1.77
Ethylene glycol monobutyl ether	111-76-2	Not Bioaccumulative; Log Pow=0.81
Orange, sweet, extract	8028-48-6	LogPow = 2.78 - 4.88

## 12.4. Mobility in soil

Substances	CAS Number	Mobility
Hydrotreated distillate	Proprietary	No information available
Hexane, 1,1'-oxybis-	112-58-3	No information available
Modified carbohydrate	Proprietary	Log KOC = 1.7
Ethylene glycol monobutyl ether	111-76-2	No information available
Orange, sweet, extract	8028-48-6	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** UN3082  
**UN proper shipping name:** Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Orange terpene, Dihexyl ether)  
**Transport Hazard Class(es):** 9  
**Packing Group:** III  
**Environmental Hazards:** Marine Pollutant  
**NAERG:** NAERG 171  
**Not Restricted when shipped by land, rail or air in containers less than 119 gallons as authorized by 49 CFR 171.4(c).**

**US DOT Bulk**

NA1993, Combustible Liquid, N.O.S. (Contains D'Limonene), Combustible Liquid, III

**Canadian TDG**

**UN Number** UN3082  
**UN proper shipping name:** Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Orange terpene, Dihexyl ether)  
**Transport Hazard Class(es):** 9  
**Packing Group:** III  
**Environmental Hazards:** Marine Pollutant

**IMDG/IMO**

**UN Number** UN3082  
**UN proper shipping name:** Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Orange terpene, Dihexyl ether)  
**Transport Hazard Class(es):** 9  
**Packing Group:** III  
**Environmental Hazards:** Marine Pollutant  
**EMS:** EmS F-A, S-F

**IATA/ICAO**

**UN Number** UN3082  
**UN proper shipping name:** Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Orange terpene, Dihexyl ether)  
**Transport Hazard Class(es):** 9  
**Packing Group:** III  
**Environmental Hazards:** Marine Pollutant

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable

**Special Precautions for User** None

<b>15. Regulatory Information</b>
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**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
Hydrotreated distillate	Proprietary	Not applicable
Hexane, 1,1'-oxybis-	112-58-3	Not applicable
Modified carbohydrate	Proprietary	Not applicable
Ethylene glycol monobutyl ether	111-76-2	Not applicable
Orange, sweet, extract	8028-48-6	Not applicable

**EPA SARA Title III Extremely Hazardous Substances**

Substances	CAS Number	EPA SARA Title III Extremely Hazardous

		Substances
Hydrotreated distillate	Proprietary	Not applicable
Hexane, 1,1'-oxybis-	112-58-3	Not applicable
Modified carbohydrate	Proprietary	Not applicable
Ethylene glycol monobutyl ether	111-76-2	Not applicable
Orange, sweet, extract	8028-48-6	Not applicable

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

Skin Corrosion or Irritation

Respiratory or Skin Sensitization

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
Hydrotreated distillate	Proprietary	Not applicable	Not applicable
Hexane, 1,1'-oxybis-	112-58-3	Not applicable	Not applicable
Modified carbohydrate	Proprietary	Not applicable	Not applicable
Ethylene glycol monobutyl ether	111-76-2	1.0%	Not applicable
Orange, sweet, extract	8028-48-6	Not applicable	Not applicable

**EPA CERCLA/Superfund Reportable Spill Quantity**

Substances	CAS Number	CERCLA RQ
Hydrotreated distillate	Proprietary	Not applicable
Hexane, 1,1'-oxybis-	112-58-3	Not applicable
Modified carbohydrate	Proprietary	Not applicable
Ethylene glycol monobutyl ether	111-76-2	Not applicable
Orange, sweet, extract	8028-48-6	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**

Substances	CAS Number	California Proposition 65
Hydrotreated distillate	Proprietary	Not applicable
Hexane, 1,1'-oxybis-	112-58-3	Not applicable
Modified carbohydrate	Proprietary	Not applicable
Ethylene glycol monobutyl ether	111-76-2	Not applicable
Orange, sweet, extract	8028-48-6	Not applicable

**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
Hydrotreated distillate	Proprietary	Not applicable	Not applicable	Not applicable
Hexane, 1,1'-oxybis-	112-58-3	Present	Not applicable	Present
Modified carbohydrate	Proprietary	Not applicable	Not applicable	Not applicable
Ethylene glycol monobutyl ether	111-76-2	Present	Present	Present Environmental hazard
Orange, sweet, extract	8028-48-6	Not applicable	Not applicable	Not applicable

**Canadian Regulations****Canadian Domestic Substances** All components listed on inventory or are exempt.**List (DSL)****16. Other information****Preparation Information**

Prepared By

Chemical Stewardship  
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**Revision Date:** 02-Apr-2019

**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/)

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**End of Safety Data Sheet**