

**SAFETY DATA SHEET****Foamer 1026**

Revision Date: 12-Jan-2015

Revision Number: 11

**1. Product Identifier & Identity for the Chemical**

**Statement of Hazardous Nature** Hazardous according to the criteria of NOHSC, Non-Dangerous Goods according to the criteria of ADG.

**1.1. Product Identifier**

**Product Name** Foamer 1026

**Other means of Identification**

**Synonyms:** None

**Product Code:** HM007362

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Foam Stabilizer

**Uses Advised Against** No information available

**Supplier's name, address and phone number**

**Manufacturer/Supplier** Halliburton Australia Pty. Ltd.  
15 Marriott Road  
Jandakot  
WA 6164  
Australia

ACN Number: 009 000 775

Telephone Number: 61 (08) 9455 8300

Fax Number: 61 (08) 9455 5300

**E-Mail address:** fdunexchem@halliburton.com

**Emergency phone number**

61 (08) 9455 8300

**Australian Poisons Information Centre**

24 Hour Service: - 13 11 26

Police or Fire Brigade: - 000 (exchange): - 1100

**2. Hazard Identification**

**Statement of Hazardous Nature** Hazardous according to the criteria of NOHSC, Non-Dangerous Goods according to the criteria of ADG.

**Classification of the hazardous chemical**

|                                     |                   |
|-------------------------------------|-------------------|
| Skin Corrosion / irritation         | Category 2 - H315 |
| Serious Eye Damage / Eye Irritation | Category 1 - H318 |
| Chronic Aquatic Toxicity            | Chronic 3 - H412  |

**Label elements, including precautionary statements****Hazard Pictograms**

**Signal Word**

Danger

**Hazard Statements**

H315 - Causes skin irritation

H318 - Causes serious eye damage

H412 - Harmful to aquatic life with long lasting effects

**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

P310 - Immediately call a POISON CENTER or doctor/physician

**Storage**

None

**Disposal**

P501 - Dispose of contents/container to an approved incineration plant

**Contains****Substances****CAS Number**

Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt 68037-05-8

Hexylene glycol 107-41-5

Cocobetaine 61789-40-0

Alcohols, C6-10, ethoxylated 70879-83-3

**Other hazards which do not result in classification**

None known

**Australia Classification***For the full text of the R/H-phrases mentioned in this Section, see Section 16***Classification**

Xi - Irritant.

**Risk Phrases**

R41 Risk of serious damage to eyes.

R38 Irritating to skin.

R53 May cause long-term adverse effects in the aquatic environment.

|  |
|--|
| <b>3. Composition/information on Ingredients</b> |
|--|

| Substances | CAS Number | PERCENT (w/w) | GHS Classification - Australia |
|------------|------------|---------------|--------------------------------|
|------------|------------|---------------|--------------------------------|

|   |            |          |   |
|---|------------|----------|---|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | 30 - 60% | Flam. Liq. 3 (H226)<br>Skin Irrit. 2 (H315)<br>Eye Dam. 1 (H318)<br>Aquatic Chronic 3 (H412)      |
| Hexylene glycol   | 107-41-5   | 10 - 30% | Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)   |
| Cocobetaine   | 61789-40-0 | 5 - 10%  | Eye Dam. 1 (H318)<br>Aquatic Chronic 2 (H411)   |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | 1 - 5%   | Acute Tox. Oral 4 (H302)<br>Skin Irrit. 2 (H315)<br>Eye Irrit. 1 (H318)<br>Aquatic Acute 1 (H400) |

#### 4. First aid measures

##### Description of necessary first aid measures

|                   |   |
|-------------------|---|
| <b>Inhalation</b> | If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention. |
| <b>Eyes</b>       | In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.     |
| <b>Skin</b>       | Wash with soap and water. Get medical attention if irritation persists. Remove contaminated clothing and launder before reuse.  |
| <b>Ingestion</b>  | If swallowed, do NOT induce vomiting. Give victim two glasses of water, Call a physician immediately. Never give anything by mouth to an unconscious person.            |

##### Symptoms caused by exposure

May cause severe eye irritation. May cause skin irritation.

##### Medical Attention and Special Treatment

**Notes to Physician** Treat symptomatically

#### 5. Fire Fighting Measures

##### Suitable extinguishing equipment

##### Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

##### Extinguishing media which must not be used for safety reasons

None known.

##### Specific hazards arising from the chemical

##### Special Exposure Hazards

Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Decomposition in fire may produce toxic gases. Vapors are heavier than air and may accumulate in low areas. Vapors may travel along the ground to be ignited at distant locations.

##### 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. Wear self-contained breathing apparatus in enclosed areas.

##### 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. Wash hands after use. Launder contaminated clothing before reuse. Ground and bond containers when transferring from one container to another.

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Storage Information

Keep container closed when not in use. Store away from oxidizers. Store at temperatures below 140 F (60 C). Product has a shelf life of 24 months.

#### Other Guidelines

No information available

## 8. Exposure Controls/Personal Protection

### Control parameters - exposure standards, biological monitoring

#### Exposure Limits

| Substances  | CAS Number | Australia NOHSC | ACGIH TLV-TWA  |
|---|------------|-----------------|----------------|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | Not applicable  | Not applicable |
| Hexylene glycol   | 107-41-5   | 25 ppm          | 25 ppm         |
| Cocobetaine   | 61789-40-0 | Not applicable  | Not applicable |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | Not applicable  | Not applicable |

### Appropriate engineering controls

#### Engineering Controls

Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

### Personal protective equipment (PPE)

#### 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

Chemical-resistant protective gloves (EN 374) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Nitrile gloves. (>= 0.4 mm thickness)  
This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced. Manufacturer's directions for use should be observed because of great diversity of types.

#### Skin Protection

Rubber apron.

#### Eye Protection

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

#### Other Precautions

Eyewash fountains and safety showers must be easily accessible.

#### Environmental Exposure Controls

No information available

## 9. Physical and Chemical Properties

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

**Physical State:** Liquid  
**Odor:** Sweet

**Color:** Clear to Light yellow Amber  
**Odor Threshold:** No information available

PropertyRemarks/ - MethodValues**pH:**

6-8 (5%)

**Freezing Point/Range**

No data available

**Melting Point/Range**

No data available

**Boiling Point/Range**

No data available

**Flash Point**

&gt; 99 °C Tag closed cup

**Evaporation rate**

No data available

**Vapor Pressure**

No data available

**Vapor Density**

&gt; 1

**Specific Gravity**

1.08

**Water Solubility**

Soluble in water

**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 applicable

**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. Oxides of nitrogen.

**11. Toxicological Information****Information on routes of exposure****Principle Route of Exposure** Eye or skin contact, inhalation.**Symptoms related to exposure****Most Important Symptoms/Effects**

May cause severe eye irritation. May cause skin irritation.

**Numerical measures of toxicity****Toxicology data for the components**

| Substances  | CAS Number | LD50 Oral                               | LD50 Dermal  | LC50 Inhalation   |
|---|------------|---|--|-------------------|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | > 2,000 mg/kg (Rat) (similar substance) | > 2,000 mg/kg (Rat) (similar substance)<br>4000-12000 mg/kg (Rats) (similar substance) | No data available |

|                              |            |  |   |  |
|------------------------------|------------|--|---|--|
| Hexylene glycol              | 107-41-5   | 3692 mg/kg (Rat)<br>> 1,400 mg/kg (Rat) (similar substance)  | > 2000 mg/kg (Rat)<br>8560 µL/kg (Rabbit)   | > the saturated vapour concentration at room temperature (Rat) |
| Cocobetaine                  | 61789-40-0 | 4900 mg/kg (Rat)<br>5000 mg/kg Rat<br>7900 mg/kg Rat<br>>10000 mg/kg Rat)  | > 2000 mg/kg (Rat)  | No data available  |
| Alcohols, C6-10, ethoxylated | 70879-83-3 | 600 mg/kg (Rat) (similar substances)<br>1600 mg/kg (Rat) (similar substance)<br>> 5000 mg/kg (Rat) (similar substance) | > 5200 mg/kg (rabbit) (similar substances)<br>> 2000 mg/kg (rat) (similar substance)<br>2500 mg/kg (rabbit) (similar substance) | > saturated concentration (similar substance)                  |

**Immediate, delayed and chronic health effects from exposure****Inhalation**

May cause respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

**Eye Contact**

May cause severe eye irritation.

**Skin Contact**

May cause skin irritation. May cause skin defatting with prolonged exposure.

**Ingestion**

May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation and central nervous system depression.

**Chronic Effects/Carcinogenicity** Repeated overexposure may cause liver and kidney effects.

**Exposure Levels**

No data available

**Interactive effects**

Skin disorders. Eye ailments.

**Data limitations**

No data available

| Substances  | CAS Number | Skin corrosion/irritation   |
|---|------------|---|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | Causes moderate skin irritation. (rabbit) (similar substances)    |
| Hexylene glycol   | 107-41-5   | Causes mild skin irritation (rabbit)                              |
| Cocobetaine   | 61789-40-0 | Non-irritating to the skin (rabbit)                               |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | May cause moderate skin irritation. (rabbit) (similar substances) |

| Substances  | CAS Number | Eye damage/irritation                                       |
|---|------------|---|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | Causes severe eye irritation. (rabbit) (similar substances) |
| Hexylene glycol   | 107-41-5   | Causes eye irritation (rabbit)                              |
| Cocobetaine   | 61789-40-0 | Causes severe eye irritation. (rabbit)                      |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | Causes severe eye irritation. (rabbit) (similar substances) |

| Substances  | CAS Number | Skin Sensitization  |
|---|------------|---|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | Did not cause sensitization on laboratory animals (guinea pig) (similar substances) |
| Hexylene glycol   | 107-41-5   | Did not cause sensitization on laboratory animals (guinea pig)                      |
| Cocobetaine   | 61789-40-0 | Did not cause sensitization on laboratory animals (guinea pig)                      |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | Did not cause sensitization on laboratory animals (similar substances)              |

| Substances  | CAS Number | Respiratory Sensitization |
|---|------------|---------------------------|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | No information available  |

|                              |            |                          |
|------------------------------|------------|--------------------------|
| Hexylene glycol              | 107-41-5   | No information available |
| Cocobetaine                  | 61789-40-0 | No information available |
| Alcohols, C6-10, ethoxylated | 70879-83-3 | No information available |

| Substances  | CAS Number | Mutagenic Effects   |
|---|------------|---|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | In vitro tests did not show mutagenic effects Some in vivo tests have shown mutagenic effects. (similar substances) |
| Hexylene glycol   | 107-41-5   | In vitro tests did not show mutagenic effects   |
| Cocobetaine   | 61789-40-0 | In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects.                         |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)    |

| Substances  | CAS Number | Carcinogenic Effects   |
|---|------------|--|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | Did not show carcinogenic effects in animal experiments (similar substances) |
| Hexylene glycol   | 107-41-5   | No information available.  |
| Cocobetaine   | 61789-40-0 | Did not show carcinogenic effects in animal experiments                      |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | Did not show carcinogenic effects in animal experiments (similar substances) |

| Substances  | CAS Number | Reproductive toxicity  |
|---|------------|--|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | Did not show teratogenic effects in animal experiments. (similar substances)   |
| Hexylene glycol   | 107-41-5   | Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.                      |
| Cocobetaine   | 61789-40-0 | Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.                      |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances) |

| Substances  | CAS Number | STOT - single exposure   |
|---|------------|--|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | No significant toxicity observed in animal studies at concentration requiring classification. (similar substances) |
| Hexylene glycol   | 107-41-5   | No significant toxicity observed in animal studies at concentration requiring classification.                      |
| Cocobetaine   | 61789-40-0 | No significant toxicity observed in animal studies at concentration requiring classification.                      |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | No significant toxicity observed in animal studies at concentration requiring classification. (similar substances) |

| Substances  | CAS Number | STOT - repeated exposure   |
|---|------------|--|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | No significant toxicity observed in animal studies at concentration requiring classification. (similar substances) |
| Hexylene glycol   | 107-41-5   | No significant toxicity observed in animal studies at concentration requiring classification.                      |
| Cocobetaine   | 61789-40-0 | No significant toxicity observed in animal studies at concentration requiring classification.                      |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | No significant toxicity observed in animal studies at concentration requiring classification. (similar substances) |

| Substances  | CAS Number | Aspiration hazard |
|---|------------|-------------------|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | Not applicable    |
| Hexylene glycol   | 107-41-5   | Not applicable    |
| Cocobetaine   | 61789-40-0 | Not applicable    |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | Not applicable    |

## 12. Ecological Information

### Ecotoxicity

**Product Ecotoxicity Data**

No data available

**Substance Ecotoxicity Data**

| Substances  | CAS Number | Toxicity to Algae   | Toxicity to Fish   | Toxicity to Microorganisms   | Toxicity to Invertebrates   |
|---|------------|---|--|--|---|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | EC50(72h): 73.52 mg/L (Skeletonema costatum)<br>ErC50(72h): 32 mg/L (Selenstrum capricornutum) (similar substance)<br>NOErC(72h): 9 mg/L (Selenastrum capricornutum)<br>NOEC(72h): 32 mg/L (Skeletonema costatum) | LC50(96h): 1 - 2.5 mg/L (Salmo trutta) (similar substance)<br>LC50(96h): 7.8 mg/L (Scophthalmus maximus)<br>NOEC(30d): 0.88 mg/L (Pimephales promelas) (similar substance)   | No information available   | EC50(48h): 1.17 mg/L (Daphnia magna) (similar substance)<br>LC50(96h): 232.5 mg/L (Acartia tonsa)<br>NOEC(21d): 0.37 mg/L (Daphnia magna) (similar substance) |
| Hexylene glycol   | 107-41-5   | EC50(72h): > 429 mg/L (Selenastrum capricornutum)   | LC50(96h): 10500 - 11000 mg/L (Pimephales promelas)<br>LC50(96h): 10000 mg/L (Lepomis macrochirus)<br>LC50(96h): 8690 mg/L (Pimephales promelas)<br>CL50(96h): 9450 mg/L (Oncorhynchus mykiss)   | Inhibitory Concentration (10d): > 1000 mg/L (Pseudomonas aeruginosa) | EC50: 2700 - 3700 mg/L<br>EC50(48h): 2800 mg/L (Ceriodaphnia reticulata)  |
| Cocobetaine   | 61789-40-0 | EC50(72h): 9.86 mg/L (Scenedesmus subspicatus)<br>NOEC(72h): 3.55 mg/L (Scenedesmus subspicatus)  | LC50(96h): .0 - 10.0 mg/L (Brachydanio rerio)<br>NOEC(28d): 16 mg/L (Oncorhynchus mykiss)  | No information available   | EC50(48h): 6.5 mg/L (Daphnia magna)<br>NOEC(21d): 0.03 mg/L (Daphnia magna)   |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | EC50(72h): 0.7 mg/L (Selenstrum capricornutum) (similar substance)<br>EC50(72h): 1.1 mg/L (Scenedesmus subspicatus) (similar substance)   | EC50(96h): 1.4 mg/L (Pimephales promelas) (similar substance)<br>EC50(96h): 3 mg/L (Brachydanio rerio) (similar substance)<br>NOEC(30d): 0.28 mg/L (Pimephales promelas) (similar substance)<br>NOEC(16d): 0.16 mg/L (Lepomis macrochirus) (similar substance) | No information available   | EC50(48h): 0.2 mg/L (Daphnia magna) (similar substance)<br>EC50(48h): 0.39 mg/L (Ceriodaphnia dubia) (similar substance)                                      |

**12.2. Persistence and degradability**

| Substances  | CAS Number | Persistence and Degradability                          |
|---|------------|--|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | Readily biodegradable (87% @ 28d) (similar substances) |
| Hexylene glycol   | 107-41-5   | Readily biodegradable (60 @ 14d)                       |
| Cocobetaine   | 61789-40-0 | Readily biodegradable (90% @ 28d)                      |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | Readily biodegradable                                  |

**12.3. Bioaccumulative potential**

| Substances  | CAS Number | Log Pow                             |
|---|------------|-------------------------------------|
| Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt | 68037-05-8 | No information available            |
| Hexylene glycol   | 107-41-5   | <0.14                               |
| Cocobetaine   | 61789-40-0 | No information available            |
| Alcohols, C6-10, ethoxylated                                    | 70879-83-3 | 12.7 - 237 L/kg (similar substance) |

**12.4. Mobility in soil**

No information available



**12.6. Other adverse effects****Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

**13. Disposal Considerations****Safe handling and disposal methods**

Disposal should be made in accordance with federal, state, and local regulations.

**Disposal of any contaminated packaging**

Follow all applicable national or local regulations.

**Environmental regulations**

Not applicable

**14. Transport Information****Transportation Information**

|                                    |                |
|------------------------------------|----------------|
| <b>UN Number:</b>                  | Not restricted |
| <b>UN Proper Shipping Name:</b>    | Not restricted |
| <b>Transport Hazard Class(es):</b> | Not applicable |
| <b>Packing Group:</b>              | Not applicable |
| <b>Environmental Hazards:</b>      | Not applicable |

**Special precautions during transport**

None

**HazChem Code**

3[Y]

**15. Regulatory Information****Safety, health and environmental regulations specific for the product****International Inventories**

|   |  |
|---|--|
| <b>Australian AICS Inventory</b>          | All components listed on inventory or are exempt.          |
| <b>New Zealand Inventory of Chemicals</b> | All components listed on inventory or are exempt.          |
| <b>EINECS Inventory</b>                   | This product, and all its components, complies with EINECS |
| <b>US TSCA Inventory</b>                  | All components listed on inventory or are exempt.          |
| <b>Canadian DSL Inventory</b>             | All components listed on inventory or are exempt.          |

**Poisons Schedule number**

None Allocated

**16. Other information, including date of preparation or last revision****Date of preparation or review**

**Revision Date:** 12-Jan-2015

**Revision Note**

Update to Format SECTION: 8

**Full text of R-phrases referred to under Sections 2 and 3**

R10 Flammable.  
R22 Harmful if swallowed.  
R36/38 Irritating to eyes and skin.  
R38 Irritating to skin.  
R41 Risk of serious damage to eyes.  
R50 Very toxic to aquatic organisms.  
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R53 May cause long-term adverse effects in the aquatic environment.

**Full text of H-Statements referred to under sections 2 and 3**

H226 - Flammable liquid and vapor  
H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H318 - Causes serious eye damage  
H319 - Causes serious eye irritation  
H400 - Very toxic to aquatic life  
H411 - Toxic to aquatic life with long lasting effects  
H412 - Harmful to aquatic life with long lasting effects

**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.

**Key abbreviations or acronyms used**

Not applicable

**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**