

**SAFETY DATA SHEET**  
**BARAKLEAN® NS PLUS****Product Trade Name:****Revision Date:** 07-Apr-2015**Revision Number:** 22**1. Identification****1.1. Product Identifier**

**Product Trade Name:** BARAKLEAN® NS PLUS  
**Synonyms:** None  
**Chemical Family:** Carbohydrate  
**Internal ID Code** HM003514

**1.2 Recommended use and restrictions on use**

**Application:** Surfactant  
**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**

Serious Eye Damage / Eye Irritation	Category 1 - H318
Acute Aquatic Toxicity	Acute 3 - H402

**2.2. Label Elements****Hazard Pictograms****Signal Word**

Danger

**Hazard Statements**

H318 - Causes serious eye damage  
H402 - Harmful to aquatic life

**Precautionary Statements**

<b>Prevention</b>	P264 - Wash face, hands and any exposed skin thoroughly after handling P273 - Avoid release to the environment P280 - Wear protective gloves/protective clothing/eye protection/face protection
<b>Response</b>	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
<b>Storage</b>	None
<b>Disposal</b>	P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

**Contains Substances**

D-Glucopyranose, oligomeric, decyl octyl glycosides

**CAS Number**

68515-73-1

**2.3 Hazards not otherwise classified**

None known

**3. Composition/information on Ingredients**

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	60 - 100%	Eye Corr. 1 (H318) Aquatic Acute 3 (H402)

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>	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
<b>Eyes</b>	Immediately flush eyes with large amounts of water for at least 30 minutes. Seek prompt medical attention.
<b>Skin</b>	Wash with soap and water. Get medical attention if irritation persists.
<b>Ingestion</b>	Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical attention.

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

Causes severe eye irritation which may damage tissue.

**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.

**8. Exposure Controls/Personal Protection****8.1 Occupational Exposure Limits**

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	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****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.

Dust/mist respirator. (N95, P2/P3)

**Hand Protection**

Normal work gloves.

**Skin Protection**

Normal work coveralls.

<b>Eye Protection</b>	Wear safety glasses or goggles to protect against exposure.
<b>Other Precautions</b>	None known.

## 9. Physical and Chemical Properties

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

<b>Physical State:</b> Liquid	<b>Color:</b> Yellow
<b>Odor:</b> Mild	<b>Odor</b> No information available
	<b>Threshold:</b>

<u>Property</u> <u>Remarks/ - Method</u>	<u>Values</u>
<b>pH:</b>	11.5-12.5
<b>Freezing Point/Range</b>	-8 °C / 18 °F
<b>Melting Point/Range</b>	No data available
<b>Boiling Point/Range</b>	> 100 °C / > 212 °F
<b>Flash Point</b>	> 100 °C / > 212 °F PMCC
<b>Flammability (solid, gas)</b>	No data available
upper flammability limit	No data available
lower flammability limit	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>	1.13
<b>Water Solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	< 3
<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

<b>VOC Content (%)</b>	No data available
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## 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

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 irritate the lungs.  
**Eye Contact** Causes severe eye irritation which may damage tissue.  
**Skin Contact** May cause 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

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	> 2000 mg/kg (Rat) > 5000 mg/kg (Rat) (similar substance)	> 2000 mg/kg (Rabbit)	No data available

Substances	CAS Number	Skin corrosion/irritation
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	Not irritating to skin in rabbits. (similar substances)

Substances	CAS Number	Eye damage/irritation
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	Causes severe eye irritation. (Rabbit) (similar substances)

Substances	CAS Number	Skin Sensitization
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	Did not cause sensitization on laboratory animals (guinea pig) (similar substances)

Substances	CAS Number	Respiratory Sensitization
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	No information available

Substances	CAS Number	Mutagenic Effects
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	In vitro tests did not show mutagenic effects (similar substances)

Substances	CAS Number	Carcinogenic Effects
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	Not regarded as carcinogenic. (similar substances)

Substances	CAS Number	Reproductive toxicity
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	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
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Substances	CAS Number	STOT - repeated exposure
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Substances	CAS Number	Aspiration hazard
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	Not applicable

## 12. Ecological Information

### 12.1. Toxicity

#### Ecotoxicity Effects

#### Product Ecotoxicity Data

No data available

#### Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	EC50 (72h) 27.22 mg/L (Desmodesmus subspicatus) EC50 (72h) 19.82 mg/L (Selenastrum 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)	EC50 (48h) >100 mg/L (Daphnia magna) EC50 (48h) 31.62 mg/L (Acartia tonsa) NOEC (21d) 1 mg/L (Daphnia magna) (similar substance)

### 12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	Readily biodegradable (100% @ 28d)

### 12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	1.77

### 12.4. Mobility in soil

Substances	Mobility
D-Glucopyranose, oligomeric, decyl octyl glycosides	Log KOC = 1.7

### 12.5 Other adverse effects

No information available

### 13. Disposal Considerations

#### 13.1. Waste treatment methods

**Disposal Method**

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

**IMDG/IMO**

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

**IATA/ICAO**

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

<b>EPA SARA (313) Chemicals</b>	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
<b>EPA CERCLA/Superfund Reportable Spill Quantity</b>	Not applicable.
<b>EPA RCRA Hazardous Waste Classification</b>	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
<b>California Proposition 65</b>	All components listed do not apply to the California Proposition 65 Regulation.
<b>MA Right-to-Know Law</b>	Does not apply.
<b>NJ Right-to-Know Law</b>	Does not apply.
<b>PA Right-to-Know Law</b>	Does not apply.
<b>Canadian Regulations</b>	
<b>Canadian DSL Inventory</b>	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:

07-Apr-2015

#### Reason for Revision

Update to Format SECTION: 2

### **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.



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**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/m<sup>3</sup> - milligram/cubic meter  
mm - millimeter  
mmHg - millimeter mercury  
w/w - weight/weight  
d - day

**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**