

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **CLEANBORE A**

Revision Date: 02-Jan-2013

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Trade Name:** CLEANBORE A  
**Synonyms:** None  
**Chemical Family:** Blend  
**Application:** Surfactant

**Manufacturer/Supplier:** Halliburton Energy Services  
P.O. Box 1431  
Duncan, Oklahoma 73536-0431  
Emergency Telephone: (281) 575-5000

**Prepared By:** Chemical Compliance  
Telephone: 1-580-251-4335  
e-mail: fdunexchem@halliburton.com

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

| Substances                                 | CAS Number  | PERCENT  | ACGIH TLV-TWA  | OSHA PEL-TWA   |
|--------------------------------------------|-------------|----------|----------------|----------------|
| d-Glucopyranoside, C9-C11 alkyl oligomeric | 132778-08-6 | 30 - 60% | Not applicable | Not applicable |

### 3. HAZARDS IDENTIFICATION

**Hazard Overview** May cause eye, skin, and respiratory irritation. May be harmful if swallowed.

### 4. FIRST AID MEASURES

**Inhalation** If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

**Skin** Wash with soap and water. Get medical attention if irritation persists. Remove contaminated clothing and launder before reuse.

**Eyes** 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.

**Ingestion** Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

**Notes to Physician** Not Applicable

## 5. FIRE FIGHTING MEASURES

|                                         |                |
|-----------------------------------------|----------------|
| Flash Point/Range (F):                  | Not Determined |
| Flash Point/Range (C):                  | Min: > 212     |
| Flash Point Method:                     | Not Determined |
| Autoignition Temperature (F):           | Min: > 100     |
| Autoignition Temperature (C):           | PMCC           |
| Flammability Limits in Air - Lower (%): | Not Determined |
| Flammability Limits in Air - Upper (%): | Not Determined |

**Fire Extinguishing Media** Water fog, carbon dioxide, foam, dry chemical.

**Special Exposure Hazards** Use water spray to cool fire exposed surfaces. Decomposition in fire may produce toxic gases.

**Special Protective Equipment for Fire-Fighters** Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

**NFPA Ratings:** Health 1, Flammability 1, Reactivity 0  
**HMS Ratings:** Health 1, Flammability 1, Reactivity 0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Use appropriate protective equipment.

**Environmental Precautionary Measures** Prevent from entering sewers, waterways, or low areas.

**Procedure for Cleaning / Absorption** Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

## 7. HANDLING AND STORAGE

**Handling Precautions** Avoid contact with eyes, skin, or clothing. Avoid breathing vapors.

**Storage Information** Store away from oxidizers. Store away from acids. Keep container closed when not in use. Store at temperature above 32 F (0 C). Do not freeze. Product has a shelf life of 24 months.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** Use in a well ventilated area.

**Respiratory Protection** Not normally needed. But if significant exposures are possible then the following respirator is recommended:  
Dust/mist respirator. (N95, P2/P3)

**Hand Protection** Impervious rubber gloves.

**Skin Protection** Normal work coveralls.

**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

**Physical State:** Liquid  
**Color:** Light yellow

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                            |                |
|--------------------------------------------|----------------|
| Odor:                                      | Characteristic |
| pH:                                        | 8-10           |
| Specific Gravity @ 20 C (Water=1):         | 1.1            |
| Density @ 20 C (lbs./gallon):              | 9.16           |
| Bulk Density @ 20 C (lbs/ft3):             | Not Determined |
| Boiling Point/Range (F):                   | Not Determined |
| Boiling Point/Range (C):                   | Not Determined |
| Freezing Point/Range (F):                  | -5             |
| Freezing Point/Range (C):                  | -20            |
| Vapor Pressure @ 20 C (mmHg):              | Not Determined |
| Vapor Density (Air=1):                     | Not Determined |
| Percent Volatiles:                         | Not Determined |
| Evaporation Rate (Butyl Acetate=1):        | Not Determined |
| Solubility in Water (g/100ml):             | Miscible       |
| Solubility in Solvents (g/100ml):          | Not Determined |
| VOCs (lbs./gallon):                        | Not Determined |
| Viscosity, Dynamic @ 20 C (centipoise):    | Not Determined |
| Viscosity, Kinematic @ 20 C (centistokes): | Not Determined |
| Partition Coefficient/n-Octanol/Water:     | Not Determined |
| Molecular Weight (g/mole):                 | Not Determined |

## 10. STABILITY AND REACTIVITY

|                                      |                                     |
|--------------------------------------|-------------------------------------|
| Stability Data:                      | Stable                              |
| Hazardous Polymerization:            | Will Not Occur                      |
| Conditions to Avoid                  | None anticipated                    |
| Incompatibility (Materials to Avoid) | Strong acids. Strong oxidizers.     |
| Hazardous Decomposition Products     | Carbon monoxide and carbon dioxide. |
| Additional Guidelines                | Not Applicable                      |

## 11. TOXICOLOGICAL INFORMATION

|                                 |                                                                                                            |
|---------------------------------|------------------------------------------------------------------------------------------------------------|
| Principle Route of Exposure     | Eye or skin contact, inhalation.                                                                           |
| Inhalation                      | May cause respiratory irritation.                                                                          |
| Skin Contact                    | May cause mild skin irritation.                                                                            |
| Eye Contact                     | May cause severe eye irritation. May cause corneal injury.                                                 |
| Ingestion                       | Irritation of the mouth, throat, and stomach. May cause abdominal pain, vomiting, nausea, and diarrhea.    |
| Aggravated Medical Conditions   | None known.                                                                                                |
| Chronic Effects/Carcinogenicity | No data available to indicate product or components present at greater than 1% are chronic health hazards. |
| Other Information               | None known.                                                                                                |
| Toxicity Tests                  |                                                                                                            |
| Oral Toxicity:                  | LD50: > 5000 mg/kg (Rat)                                                                                   |

|                                               |                             |
|-----------------------------------------------|-----------------------------|
| <b>Dermal Toxicity:</b>                       | LD50: > 2000 mg/kg (Rabbit) |
| <b>Inhalation Toxicity:</b>                   | Not determined              |
| <b>Primary Irritation Effect:</b>             | Not determined              |
| <b>Carcinogenicity</b>                        | Not determined              |
| <b>Genotoxicity:</b>                          | Not determined              |
| <b>Reproductive / Developmental Toxicity:</b> | Not determined              |

## 12. ECOLOGICAL INFORMATION

|                                  |                |
|----------------------------------|----------------|
| <b>Mobility (Water/Soil/Air)</b> | Not determined |
| <b>Persistence/Degradability</b> | Not determined |
| <b>Bio-accumulation</b>          | Not determined |

### Ecotoxicological Information

|                                    |                               |
|------------------------------------|-------------------------------|
| <b>Acute Fish Toxicity:</b>        | Not determined                |
| <b>Acute Crustaceans Toxicity:</b> | TLM48: 38 ppm (Daphnia Pulex) |
| <b>Acute Algae Toxicity:</b>       | Not determined                |

|                                  |                |
|----------------------------------|----------------|
| <b>Chemical Fate Information</b> | Not determined |
| <b>Other Information</b>         | Not applicable |

## 13. DISPOSAL CONSIDERATIONS

|                               |                                                                                   |
|-------------------------------|-----------------------------------------------------------------------------------|
| <b>Disposal Method</b>        | Disposal should be made in accordance with federal, state, and local regulations. |
| <b>Contaminated Packaging</b> | Follow all applicable national or local regulations.                              |

## 14. TRANSPORT INFORMATION

### Land Transportation

**DOT**  
Not restricted

**Canadian TDG**  
Not restricted

**ADR**  
Not restricted

### Air Transportation

**ICAO/IATA**  
Not restricted

### Sea Transportation

**IMDG**

Not restricted

**Other Transportation Information**

Labels: None

**15. REGULATORY INFORMATION****US Regulations**

|                                                          |                                                                                                                                      |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>US TSCA Inventory</b>                                 | All components listed on inventory or are exempt.                                                                                    |
| <b>EPA SARA Title III Extremely Hazardous Substances</b> | Not applicable                                                                                                                       |
| <b>EPA SARA (311,312) Hazard Class</b>                   | 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.                                                                                                                      |

**Canadian Regulations**

|                               |                                                   |
|-------------------------------|---------------------------------------------------|
| <b>Canadian DSL Inventory</b> | All components listed on inventory or are exempt. |
| <b>WHMIS Hazard Class</b>     | D2B Toxic Materials                               |

**16. OTHER INFORMATION****The following sections have been revised since the last issue of this MSDS**

Not applicable

**Additional Information**

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

**Disclaimer Statement**

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

**\*\*\*END OF MSDS\*\*\***