

**MATERIAL SAFETY DATA SHEET****Product Trade Name:** **DELTA FRACPAC****Revision Date:** 03-Jan-2012**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****Product Trade Name:** DELTA FRACPAC**Synonyms:** None**Chemical Family:** Blend**Application:** Fluid**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   |
|----------------------------------|------------|-----------|----------------|----------------|
| Contains no hazardous substances | Mixture    | 60 - 100% | Not applicable | Not applicable |

**3. HAZARDS IDENTIFICATION****Hazard Overview** May cause eye, skin, and respiratory irritation.**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.

**Eyes** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**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):                  | Not Determined |
| Flash Point Method:                     | Not Determined |
| Autoignition Temperature (F):           | Not Determined |
| Autoignition Temperature (C):           | Not Determined |
| Flammability Limits in Air - Lower (%): | Not Determined |
| Flammability Limits in Air - Upper (%): | Not Determined |

**Fire Extinguishing Media** All standard firefighting media.

**Special Exposure Hazards** Not applicable.

**Special Protective Equipment for Fire-Fighters** Not applicable.

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

**HMIS Ratings:** Health 0, Flammability 0, Reactivity 0

## 6. ACCIDENTAL RELEASE MEASURES

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

**Environmental Precautionary Measures** None known.

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

## 7. HANDLING AND STORAGE

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

**Storage Information** Store away from oxidizers. Store in a cool well ventilated area. Keep container closed when not in use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

**Respiratory Protection** Not normally necessary.

**Hand Protection** Normal work gloves.

**Skin Protection** Normal work coveralls.

**Eye Protection** Wear safety glasses or goggles to protect against exposure.

**Other Precautions** None known.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                    |                |
|------------------------------------|----------------|
| Physical State:                    | Gel            |
| Color:                             | Opaque         |
| Odor:                              | Odorless       |
| pH:                                | Not Determined |
| Specific Gravity @ 20 C (Water=1): | 1.8            |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                             |                |
|---------------------------------------------|----------------|
| Density @ 20 C (lbs./gallon):               | 15.0           |
| Bulk Density @ 20 C (lbs/ft3):              | Not Determined |
| Boiling Point/Range (F):                    | Not Determined |
| Boiling Point/Range (C):                    | Not Determined |
| Freezing Point/Range (F):                   | Not Determined |
| Freezing Point/Range (C):                   | Not Determined |
| 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):              | Soluble        |
| Solubility in Solvents (g/100ml):           | Not Determined |
| VOCs (lbs./gallon):                         | Not Determined |
| Viscosity, Dynamic @ 20 C (centipoise):     | Not Determined |
| Viscosity, Kinematic @ 20 C (centistrokes): | 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 oxidizers. |
| Hazardous Decomposition Products     | None known.       |
| Additional Guidelines                | Not Applicable    |

## 11. TOXICOLOGICAL INFORMATION

|                                 |                                                                                                            |
|---------------------------------|------------------------------------------------------------------------------------------------------------|
| Principle Route of Exposure     | Eye or skin contact, inhalation.                                                                           |
| Inhalation                      | May cause mild respiratory irritation.                                                                     |
| Skin Contact                    | Prolonged or repeated contact may cause slight skin irritation.                                            |
| Eye Contact                     | May cause mild eye irritation.                                                                             |
| Ingestion                       | Irritation of the mouth, throat, and stomach.                                                              |
| Aggravated Medical Conditions   | Skin disorders.                                                                                            |
| 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:                  | Not determined                                                                                             |
| Dermal Toxicity:                | Not determined                                                                                             |
| Inhalation Toxicity:            | Not determined                                                                                             |

|                                                   |                |
|---------------------------------------------------|----------------|
| <b>Primary Irritation Effect:</b>                 | Not determined |
| <b>Carcinogenicity</b>                            | Not determined |
| <b>Genotoxicity:</b>                              | Not determined |
| <b>Reproductive /<br/>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> | Not determined |
| <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

|                                                   |                                                                                                                                      |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 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                   | None                                                                                                                                 |
| EPA SARA (313) Chemicals                          | This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372). |
| EPA CERCLA/Superfund Reportable Spill Quantity    | 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                         | All components listed do not apply to the California Proposition 65 Regulation.                                                      |
| MA Right-to-Know Law                              | One or more components listed.                                                                                                       |
| NJ Right-to-Know Law                              | One or more components listed.                                                                                                       |
| PA Right-to-Know Law                              | One or more components listed.                                                                                                       |

### Canadian Regulations

|                        |                                                   |
|------------------------|---------------------------------------------------|
| Canadian DSL Inventory | All components listed on inventory or are exempt. |
| WHMIS Hazard Class     | Un-Controlled                                     |

## 16. OTHER INFORMATION

**The following sections have been revised since the last issue of this MSDS**  
Not applicable

|                               |                                                                                                                                                                                                                                                        |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Additional Information</b> | For additional information on the use of this product, contact your local Halliburton representative.<br><br>For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335. |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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