

# MATERIAL SAFETY DATA SHEET

**Product Trade Name:** HALAD® 9LXP LIQUID CEMENT ADDITIVE

**Revision Date:** 02-Jan-2013

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Trade Name:** HALAD® 9LXP LIQUID CEMENT ADDITIVE  
**Synonyms:** None  
**Chemical Family:** Blend  
**Application:** Fluid Loss Additive

**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   |
|---|------------|----------|----------------|----------------|
| Polyvinylpyrrolidone                    | 9003-39-8  | 1 - 5%   | Not applicable | Not applicable |
| Polyisobutylene                         | 9003-27-4  | 1 - 5%   | Not applicable | Not applicable |
| Hydrotreated light petroleum distillate | 64742-47-8 | 30 - 60% | Not applicable | Not applicable |

## 3. HAZARDS IDENTIFICATION

**Hazard Overview** May cause eye and skin irritation. May cause headache, dizziness, and other central nervous system effects. 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.

**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** Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration.

**Notes to Physician** Not Applicable

## 5. FIRE FIGHTING MEASURES

|   |                |
|---|----------------|
| Flash Point/Range (F):                  | 160            |
| Flash Point/Range (C):                  | 71             |
| Flash Point Method:                     | Not Determined |
| Autoignition Temperature (F):           | Not Determined |
| Autoignition Temperature (C):           | Not Determined |
| Flammability Limits in Air - Lower (%): | 0.9            |
| Flammability Limits in Air - Upper (%): | 6              |

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

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

**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 2, Reactivity 0

**HMIS Ratings:** Health 1, Flammability 2, 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 in a cool well ventilated area. Keep container closed when not in use. Product has a shelf life of 24 months.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

**Respiratory Protection** Organic vapor respirator.

**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:          | Brown            |
| Odor:           | Mild hydrocarbon |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|  |                |
|--|----------------|
| pH:  | Not Determined |
| Specific Gravity @ 20 C (Water=1):         | 0.98           |
| Density @ 20 C (lbs./gallon):              | 8.22           |
| Bulk Density @ 20 C (lbs/ft3):             | Not Determined |
| Boiling Point/Range (F):                   | 408            |
| Boiling Point/Range (C):                   | 208            |
| Freezing Point/Range (F):                  | Not Determined |
| Freezing Point/Range (C):                  | Not Determined |
| Vapor Pressure @ 20 C (mmHg):              | 0.2            |
| Vapor Density (Air=1):                     | Not Determined |
| Percent Volatiles:                         | 49.4           |
| Evaporation Rate (Butyl Acetate=1):        | Not Determined |
| Solubility in Water (g/100ml):             | Insoluble      |
| 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 oxidizers.                                     |
| Hazardous Decomposition Products     | Oxides of sulfur. Carbon monoxide and carbon dioxide. |
| Additional Guidelines                | Not Applicable  |

## 11. TOXICOLOGICAL INFORMATION

|                                 |   |
|---------------------------------|---|
| Principle Route of Exposure     | Eye or skin contact, inhalation.  |
| Inhalation                      | May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness. |
| Skin Contact                    | May cause skin defatting with prolonged exposure. May cause skin irritation.  |
| Eye Contact                     | May cause eye irritation.   |
| Ingestion                       | Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.           |
| 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                  |   |

|   |                |
|---|----------------|
| <b>Oral Toxicity:</b>                             | Not determined |
| <b>Dermal Toxicity:</b>                           | Not determined |
| <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 /<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**

|  |  |
|--|--|
| <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<br>Fire 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>                         | The California Proposition 65 regulations apply to this product.   |
| <b>MA Right-to-Know Law</b>                              | One or more components listed.   |
| <b>NJ Right-to-Know Law</b>                              | One or more components listed.   |
| <b>PA Right-to-Know Law</b>                              | One or more components listed.   |

**Canadian Regulations**

|                               |   |
|-------------------------------|---|
| <b>Canadian DSL Inventory</b> | All components listed on inventory or are exempt. |
| <b>WHMIS Hazard Class</b>     | B3 Combustible Liquids<br>D2B Toxic Materials     |

**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. |
|-------------------------------|--|

**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\*\*\***