

# MATERIAL SAFETY DATA SHEET

**Product Trade Name:** LGC-35ZD

**Revision Date:** 03-Jan-2012

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Trade Name:** LGC-35ZD  
**Synonyms:** None  
**Chemical Family:** Blend  
**Application:** Liquid Gel Concentrate

**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         |
|---|------------|----------|----------------------|----------------------|
| Hydrotreated light petroleum distillate |            | 30 - 60% | Not applicable       | Not applicable       |
| Polysaccharide                          |            | 30 - 60% | 10 mg/m <sup>3</sup> | 15 mg/m <sup>3</sup> |

## 3. HAZARDS IDENTIFICATION

**Hazard Overview** May cause eye, skin, and respiratory irritation. May cause headache, dizziness, and other central nervous system effects. May cause allergic respiratory reaction. May be harmful if swallowed.

## 4. FIRST AID MEASURES

**Inhalation** 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.

**Skin** In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse.

**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):                  | 176-200        |
| Flash Point/Range (C):                  | 80-93          |
| Flash Point Method:                     | COC            |
| Autoignition Temperature (F):           | Not Determined |
| Autoignition Temperature (C):           | Not Determined |
| Flammability Limits in Air - Lower (%): | 0.5            |
| Flammability Limits in Air - Upper (%): | 4.9            |

**Fire Extinguishing Media** Carbon Dioxide, Dry Chemicals, Foam.

**Special Exposure Hazards** Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. 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

**HMIS 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. Wash hands after use. Launder contaminated clothing before reuse.

**Storage Information** Store away from oxidizers. Store in a cool well ventilated area. Keep from heat, sparks, and open flames. 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** Not normally needed. But if significant exposures are possible then the following respirator is recommended:  
Organic vapor respirator with a dust/mist filter.

**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:                                     | Off white      |
| Odor:                                      | Odorless       |
| pH:  | 6.5 - 7.5 (1%) |
| Specific Gravity @ 20 C (Water=1):         | 1.04           |
| Density @ 20 C (lbs./gallon):              | 8.66           |
| Bulk Density @ 20 C (lbs/ft3):             | Not Determined |
| Boiling Point/Range (F):                   | 392            |
| Boiling Point/Range (C):                   | 200            |
| 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 (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                  | Keep away from heat, sparks and flame. |
| Incompatibility (Materials to Avoid) | 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. May cause allergic respiratory reaction. May cause chemical pneumonia. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.  |
| Skin Contact                | Causes drying of the skin. May cause skin irritation.   |
| Eye Contact                 | May cause eye irritation.   |
| Ingestion                   | Irritation of the mouth, throat, and stomach. Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal. May cause central nervous system depression including headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue blurred vision, slurred speech, giddiness, tremors and convulsions. |

|  |  |
|--|--|
| <b>Aggravated Medical Conditions</b>   | Skin disorders.  |
| <b>Chronic Effects/Carcinogenicity</b> | No data available to indicate product or components present at greater than 1% are chronic health hazards. |
| <b>Other Information</b>               | 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 / 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

**DOT (Bulk)**  
UN1268, Petroleum Distillates, N.O.S., Combustible Liquid, III  
Classified in accordance with 49 CFR 172.101(d)(4)

**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** Acute Health Hazard  
Fire Hazard

**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** Does not apply.

**PA Right-to-Know Law** Does not apply.

### **Canadian Regulations**

**Canadian DSL Inventory** Product contains one or more components not listed on the inventory.

**WHMIS Hazard Class** B3 Combustible Liquids

## **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**

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