

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **LGC-VIM NS**

Revision Date: 21-Dec-2012

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Trade Name:** LGC-VIM NS  
**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   |
|--------------------|------------|----------|----------------|----------------|
| Potassium chloride | 7447-40-7  | 10 - 30% | Not applicable | Not applicable |

### 3. HAZARDS IDENTIFICATION

**Hazard Overview** May cause eye 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** Under normal conditions, first aid procedures are not required.

**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 |

|   |  |
|---|--|
| <b>Fire Extinguishing Media</b>                       | All standard firefighting media.   |
| <b>Special Exposure Hazards</b>                       | Decomposition in fire may produce toxic gases.   |
| <b>Special Protective Equipment for Fire-Fighters</b> | Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel. |
| <b>NFPA Ratings:</b>                                  | Health 1, Flammability 0, Reactivity 0   |
| <b>HMS Ratings:</b>                                   | Health 1, Flammability 0, Reactivity 0   |

## 6. ACCIDENTAL RELEASE MEASURES

|   |  |
|---|--|
| <b>Personal Precautionary Measures</b>      | Use appropriate protective equipment.  |
| <b>Environmental Precautionary Measures</b> | Prevent from entering sewers, waterways, or low areas.   |
| <b>Procedure for Cleaning / Absorption</b>  | Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove. |

## 7. HANDLING AND STORAGE

|                             |  |
|-----------------------------|--|
| <b>Handling Precautions</b> | Avoid contact with eyes, skin, or clothing.  |
| <b>Storage Information</b>  | Store away from oxidizers. Store in a cool well ventilated area. Keep container closed when not in use. Product has a shelf life of 3 months |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

|                               |  |
|-------------------------------|--|
| <b>Engineering Controls</b>   | Use in a well ventilated area.   |
| <b>Respiratory Protection</b> | Not normally needed. But if significant exposures are possible then the following respirator is recommended:<br>Dust/mist respirator. (N95, P2/P3) |
| <b>Hand Protection</b>        | Normal work gloves.  |
| <b>Skin Protection</b>        | 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

|                        |             |
|------------------------|-------------|
| <b>Physical State:</b> | Gel         |
| <b>Color:</b>          | Light brown |
| <b>Odor:</b>           | Odorless    |
| <b>pH:</b>             | 13.5        |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|  |                |
|--|----------------|
| Specific Gravity @ 20 C (Water=1):         | Not Determined |
| Density @ 20 C (lbs./gallon):              | Not Determined |
| 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 (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     | 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.                                 |
| Skin Contact                    | Prolonged or repeated contact may cause slight skin irritation.  |
| Eye Contact                     | May cause mild eye irritation.   |
| Ingestion                       | None known   |
| 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:                  | Not determined   |
| Dermal Toxicity:                | Not determined   |
| Inhalation Toxicity:            | Not determined   |

**Primary Irritation Effect:** Not determined  
**Carcinogenicity** Not determined  
**Genotoxicity:** Not determined  
**Reproductive / Developmental Toxicity:** Not determined

## 12. ECOLOGICAL INFORMATION

**Mobility (Water/Soil/Air)** Not determined  
**Persistence/Degradability** Not determined  
**Bio-accumulation** Not determined

### Ecotoxicological Information

**Acute Fish Toxicity:** Not determined  
**Acute Crustaceans Toxicity:** Not determined  
**Acute Algae Toxicity:** Not determined

**Chemical Fate Information** Not determined  
**Other Information** Not applicable

## 13. DISPOSAL CONSIDERATIONS

**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

### 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>                   | None   |
| <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>                              | 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>     | 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\*\*\*