HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: LO-Gard

Revision Date: 20-Feb-2014 **Revision Number: 8**

1. Product and Company Identification

Product Identifier

LO-Gard **Product Trade Name:** Synonyms: None **Chemical Family:** Blend Internal ID Code HM006100

Product Use

Conformance Control **Application:**

Manufacturer's Name and Contact Details

Name and Address Halliburton Energy Services

645 - 7th Ave SW Suite 2200

Calgary, AB T2P 4G8 Canada

Emergency Telephone Number (281) 575-5000

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

2. Hazard(s) Identification

WHIMIS Classification

WHMIS Hazard Class Un-Controlled

WHMIS Symbol(s)

Summary of hazards of the product

Hazard Overview May cause mild eye, skin, and respiratory irritation.

3. Composition/information on Ingredients							
Substances	CAS Number	PERCENT (w/w)	HMIRA Registry Number	Filing Date			
Contains no hazardous substances	Mixture	60 - 100%	Not applicable	Not applicable			

4. First aid measures

Description of first aid measures

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory

irritation develops or if breathing becomes difficult.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get medical attention if irritation persists.

Skin Wash with soap and water. 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.

Most important symptoms and effects, both acute and delayed

May cause mild eye, skin, and respiratory irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. Fire Fighting Measures

Extinguishing media

Suitable Extinguishing Media

All standard fire fighting media

Extinguishing media which must not be used for safety reasons

None known.

Special hazards arising from the substance or mixture

Special Exposure Hazards

Not applicable.

Advice for firefighters

Special Protective Equipment for Fire-Fighters

Not applicable.

Hazardous combustion products

None known.

6. Accidental release measures

Personal precautions and emergency producedures

Protective Equipment

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

Precautions for safe handling

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors.

Conditions for safe storage and Incompatible materials for storage

Store in a cool well ventilated area. Keep container closed when not in use.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits

Exposure Limits

Substances CAS Number ACGIH TLV-TWA OSHA PEL-TWA

Contains no hazardous Mixture Not applicable Not applicable substances

Appropriate engineering controls

Engineering Controls Use in a well ventilated area.

Personal Protective Equipment (PPE)

Respiratory Protection If engineering controls and work practices cannot keep exposure below

occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified

professional.

Not normally necessary.

Hand Protection Impervious rubber 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

Information on basic physical and chemical properties

Physical State:LiquidColor:Colorless to AmberOdor:AmineOdor Threshold:No information available

Property Values
Remarks/ - Method

pH: 8.5 - 8.9

PH Concentration of Solution:No information available.Freezing Point/RangeNo information available.Melting Point/RangeNo information available

Boiling Point/Range (C): 100

Flash Point/Range (C):

Flash Point Method:

Autoignition Temperature (C):

Flammability Limits in Air - Lower (%):

Flammability Limits in Air - Upper (%):

No information available.

Evaporation Rate (Butyl Acetate=1):

No information available.

Vapor Pressure @ 20 C (mmHg): 0.5

Vapor Density (Air=1): No information available.

Specific Gravity @ 20 C (Water=1): 1.0127 Solubility in Water (g/100ml): Soluble

Solubility in other solvents

Partition Coefficient/n-Octanol/Water:

Decomposition Temperature (C):

Viscosity

No information available.

No information available.

No information available.

No information available

Explosive Properties

No information available
Oxidizing Properties

No information available

Other Information

Molecular Weight (g/mole):No information available.VOC Content (%)No information available

10. Stability and Reactivity

Conditions of Reactivity

Conditions to Avoid None anticipated

Hazardous Polymerization: Will Not Occur

Chemical Stability

Stable

Sensitivity to Static Discharge

Not available

Sensitivity to Mechanical Impact

Not available

Incompatible materials

Strong oxidizers.

Hazardous Decomposition Products

None known.

11. Toxicological Information

Routes of entry

Eye or skin contact, inhalation.

Information on Toxicological Effects

Acute effects from exposure

Inhalation May cause mild respiratory irritation.

Eye Contact May cause eye irritation

Skin Contact Prolonged or repeated contact may cause skin irritation.

Ingestion None known

Chronic effects from exposure

Chronic Effects/Carcinogenicity

No data available to indicate product or components present at greater than 1% are chronic

health hazards.

Irritancy of product

Irritation Non-irritating to the skin Non-irritating to the eye

Sensitization of product

Sensitization Not confirmed to cause skin or respiratory sensitization.

Mutagenicity

Mutagenic Effects Not regarded as mutagenic

Carcinogenicity

Carcinogenic Effects No ingredient of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC, NTP, or OSHA.

Reproductive Toxicity

Reproductive Toxicity

This product does not contain any known or suspected reproductive hazards

Teratogenicity/embryotoxicity

Teratogenic Not a confirmed teratogen or embryotoxin.

Toxicologically synergistic material Not available

Acute Toxicity

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Contains no hazardous	Mixture	No data available	No data available	No data available
substances				

12. Ecological Information

Toxicity

Ecotoxicity Effects

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity for Invertebrates
Contains no hazardous substances	Mixture	No information available	No information available	No information available	No information available

Persistence and Degradability

No information available

Bioaccumlation potential

No information available

Mobility in soil

No information available

Results of PBT and vPvB assessment

No information available.

Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

13. Disposal Considerations

Disposal MethodDisposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

14. Transport Information

Canadian TDG

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable

IATA/ICAO

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable

IMDG/IMO

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable

Special Precautions for User None

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory Information

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canadian Regulations

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

WHMIS Hazard Class Un-Controlled

WHMIS Symbol(s)

US Regulations

US TSCA Inventory

All components listed on inventory or are exempt.

16. Other Information

Preparation Information

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

Revision Date: 20-Feb-2014

Not applicable

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

representative.

For questions about the Safety Data Sheet for this or other Halliburton products,

contact Chemical Compliance at 1-580-251-4335.

Key or legend to abbreviations and acronyms

WHMIS: Workplace Hazardous Materials Information System

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

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END OF MSDS