HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: WG-11 GELLING AGENT

Revision Date: 10-Mar-2014 **Revision Number: 15**

1. Product and Company Identification

Product Identifier

WG-11 GELLING AGENT **Product Trade Name:**

Synonyms: None

Chemical Family: Polysaccharide Internal ID Code HM001415

Product Use

Application: Gelling Agent

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

Un-Controlled WHMIS Hazard Class

WHMIS Symbol(s)

Summary of hazards of the product

Hazard Overview May cause mild eye, skin, and respiratory irritation. Organic dust in the presence

of an ignition source can be explosive in high concentrations. Good housekeeping

practices are required to minimize this potential.

3. Composition/information on Ingredients

Substances	CAS Number		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

InhalationIf 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.

Ingestion Under normal conditions, first aid procedures are not required.

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

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

Special hazards arising from the substance or mixture

Special Exposure Hazards

Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

Advice for firefighters

Special Protective Equipment for Fire-Fighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

Hazardous combustion products

Carbon monoxide and carbon dioxide.

6. Accidental release measures

Personal precautions and emergency producedures

Protective Equipment

Use appropriate protective equipment. Avoid creating and breathing dust.

Environmental Precautionary Measures

None known.

Procedure for Cleaning / Absorption

Scoop up and remove.

7. Handling and Storage

Precautions for safe handling

Avoid creating or inhaling dust.

Conditions for safe storage and Incompatible materials for storage

Store away from oxidizers. Store in a cool, dry location. Product has a shelf life of 12 months.

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 Not normally needed. But if significant exposures are possible then the following

respirator is recommended:

Dust/mist respirator. (N95, P2/P3)

Hand Protection Normal work gloves. **Skin Protection** Normal work coveralls.

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

Other Precautions None known.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical State: Solid White to light straw Color: Odor: Bean Odor Threshold: No information available

Property Values

Remarks/ - Method

pH: 10.1

No information available. pH Concentration of Solution: Freezing Point/Range No information available. Melting Point/Range No information available **Boiling Point/Range (C):** No information available.

Flash Point/Range (C): >200 °C Flash Point Method: **SETA Autoignition Temperature (C):** 510

Flammability Limits in Air - Lower (%): No information available. Flammability Limits in Air - Upper (%): No information available. Evaporation Rate (Butyl Acetate=1): No information available. Vapor Pressure @ 20 C (mmHg): No information available. Vapor Density (Air=1): No information available.

Specific Gravity @ 20 C (Water=1): 1.3 Solubility in Water (g/100ml): Forms gel

Solubility in other solvents No information available. Partition Coefficient/n-Octanol/Water: No information available. **Decomposition Temperature (C):** No information available. No information available **Viscosity** No information available **Explosive Properties**

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

Carbon monoxide and carbon dioxide.

11. Toxicological Information

Routes of entry

Eye or skin contact, inhalation.

Information on Toxicological Effects

Acute effects from exposure

Inhalation May cause allergic respiratory reaction. May cause respiratory irritation.

Eye Contact May cause mild eye irritation. **Skin Contact** May cause mild 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 teratogen or embroytoxin.

Toxicologically synergistic material Not available

Acute Toxicity

LD50 Oral: 9500 mg/kg; (rat)

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 to Invertebrates
Contains no hazardous substances	Mixture	No information available	No information available	No information available	No information available

Persistence and Degradability

Readily biodegradable

Bioaccumlation potential

Does not bioaccumulate

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 Method Follow all applicable community, national or regional regulations regarding waste

management methods.

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

All components listed on inventory or are exempt.

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: 10-Mar-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

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