

**MATERIAL SAFETY DATA SHEET****Product Trade Name:**        **WG-39****Revision Date:**    27-Jun-2013**Revision Number:** 3**1. Product and Company Identification****Product Identifier**

**Product Trade Name:**        WG-39  
**Synonyms:**                    None  
**Chemical Family:**         Carbohydrate  
**Internal ID Code**             HM007318

**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****WHMIS 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. Airborne dust may be explosive.

**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**

<b>Inhalation</b>	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
<b>Eyes</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
<b>Skin</b>	Wash with soap and water. Get medical attention if irritation persists. Remove contaminated clothing and launder before reuse.
<b>Ingestion</b>	Under normal conditions, first aid procedures are not required.

**Most important symptoms and effects, both acute and delayed**

No significant hazards expected.

**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 procedures****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. Avoid dust accumulations. Slippery when wet. Ground and bond containers when transferring from one container to another.

**Conditions for safe storage and incompatible materials for storage**

Store away from oxidizers. Store in a dry location. Product has a shelf life of 36 months.

## 8. Exposure Controls/Personal Protection

**Occupational Exposure Limits****Exposure Limits**

Substances	CAS Number	ACGIH TLV-TWA	OSHA PEL-TWA
Contains no hazardous substances	Mixture	Not applicable	Not applicable

**Appropriate engineering controls****Engineering Controls**

A well ventilated area to control dust levels. Local exhaust ventilation should be used in areas without good cross ventilation.

**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 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.

**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:** Powder

**Color:** White to tan

**Odor:** Odorless

**Odor Threshold:** No information available

PropertyValues

Remarks/ - Method

**pH:**

6.5-9 (1%)

**pH Concentration of Solution:**

No information available.

**Freezing Point/Range**

No information available.

**Melting Point/Range**

No information available.

**Boiling Point/Range (C):**

No information available.

**Flash Point/Range (C):**

221 °C

**Flash Point Method:**

No information available.

**Autoignition Temperature (C):**

400

**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):**

1.6

**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.

**Viscosity**

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**  
**Hazardous Polymerization:**

None anticipated  
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 respiratory irritation.

**Eye Contact**

May cause mechanical irritation to eye.

**Skin Contact**

Prolonged or repeated contact may cause slight 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 at concentrations >0.1%

#### 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 substances	Mixture	No data available	No data available	No data available

**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**

Readily biodegradable

**Bioaccumulation 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 Method** Bury in a licensed landfill according to 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**

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:**

27-Jun-2013

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/](http://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\*\*\***