

**MATERIAL SAFETY DATA SHEET****Product Trade Name:**        **MAX SEAL®****Revision Date:**                20-Dec-2012**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Trade Name:**        MAX SEAL®  
**Synonyms:**                    None  
**Chemical Family:**        Polysaccharide  
**Application:**                Additive

**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**

<b>Substances</b>	<b>CAS Number</b>	<b>PERCENT (w/w)</b>	<b>ACGIH TLV-TWA</b>	<b>OSHA PEL-TWA</b>
Contains no hazardous substances	Mixture	60 - 100%	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	<b>Min:</b> > 200
Flash Point/Range (C):	Not Determined	<b>Min:</b> > 93
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	

**Fire Extinguishing Media** All standard firefighting media.

**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. 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 0, Reactivity 0  
**HMIS Ratings:** Health 1, Flammability 0, Physical Hazard 0 , PPE: B

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Use appropriate protective equipment.

**Environmental Precautionary Measures** None known.

**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.

**Storage Information** Store away from oxidizers. Store in a cool well ventilated area. Keep container closed when not in use. Product has a shelf life of 12 months.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** Use in a well ventilated area.

**Respiratory Protection** Not normally necessary.

**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

<b>Physical State:</b>	Gel
<b>Color:</b>	Pink to tan to gray
<b>Odor:</b>	Characteristic
<b>pH:</b>	7.5-10
<b>Specific Gravity @ 20 C (Water=1):</b>	1.32
<b>Density @ 20 C (lbs./gallon):</b>	11.00
<b>Bulk Density @ 20 C (lbs/ft3):</b>	Not Determined
<b>Boiling Point/Range (F):</b>	Not Determined
<b>Boiling Point/Range (C):</b>	Not Determined
<b>Freezing Point/Range (F):</b>	Not Determined
<b>Freezing Point/Range (C):</b>	Not Determined
<b>Vapor Pressure @ 20 C (mmHg):</b>	Not Determined
<b>Vapor Density (Air=1):</b>	Not Determined
<b>Percent Volatiles:</b>	65
<b>Evaporation Rate (Butyl Acetate=1):</b>	Not Determined
<b>Solubility in Water (g/100ml):</b>	Soluble
<b>Solubility in Solvents (g/100ml):</b>	Not Determined
<b>VOCs (lbs./gallon):</b>	Not Determined
<b>Viscosity, Dynamic @ 20 C (centipoise):</b>	Not Determined
<b>Viscosity, Kinematic @ 20 C (centistokes):</b>	Not Determined
<b>Partition Coefficient/n-Octanol/Water:</b>	Not Determined
<b>Molecular Weight (g/mole):</b>	Not Determined

## 10. STABILITY AND REACTIVITY

<b>Stability Data:</b>	Stable
<b>Hazardous Polymerization:</b>	Will Not Occur
<b>Conditions to Avoid</b>	None known.
<b>Incompatibility (Materials to Avoid)</b>	Strong oxidizers.
<b>Hazardous Decomposition Products</b>	Oxides of phosphorus. Carbon monoxide and carbon dioxide.
<b>Additional Guidelines</b>	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

<b>Principle Route of Exposure</b>	Eye or skin contact, inhalation.
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### Symptoms related to exposure

<b>Acute Toxicity</b>	
<b>Inhalation</b>	May cause respiratory irritation.
<b>Eye Contact</b>	May cause mild eye irritation.
<b>Skin Contact</b>	None known.
<b>Ingestion</b>	None known

<b>Chronic Effects/Carcinogenicity</b>	No data available to indicate product or components present at greater than 1% are chronic health hazards.
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### Toxicology data for the components

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

### Ecotoxicological Information

#### Ecotoxicity Product

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

#### Ecotoxicity Substance

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

#### 12.2 Persistence and degradability

No information available

#### 12.3 Bioaccumulative potential

No information available

#### 12.4 Mobility in soil

No information available

#### 12.5 Results of PBT and vPvB assessment

No information available.

#### 12.6 Other adverse effects

## 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>	Product contains one or more components not listed on the inventory.
<b>WHMIS Hazard Class</b>	Un-Controlled

### 16. OTHER INFORMATION

**The following sections have been revised since the last issue of this SDS**

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.

**Disclaimer Statement**

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