

MATERIAL SAFETY DATA SHEET

Product Trade Name: **BP-10**

Revision Date: 07-Jan-2015

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: BP-10
Synonyms: None
Chemical Family: Polysaccharide
Application: Viscosifier

Manufacturer/Supplier: Halliburton Energy Services, Inc.
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 (w/w)	ACGIH TLV-TWA	OSHA PEL-TWA
Xanthan gum	11138-66-2	60 - 100%	10 mg/m ³	15 mg/m ³

3. HAZARDS IDENTIFICATION

Hazard Overview: May cause eye irritation Airborne dust may be explosive.

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. Get medical attention if irritation persists.

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):	950
Flash Point/Range (C):	510
Flash Point Method:	Not Determined
Autoignition Temperature (F):	400
Autoignition Temperature (C):	204
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Lower (oz./ft ³):	0.04 - 0.4
Flammability Limits in Air - Upper (%):	Not Determined

Fire Extinguishing Media Water fog, carbon dioxide, foam, dry chemical.

Special Exposure Hazards Decomposition in fire may produce toxic gases. Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

Special Protective Equipment for Fire-Fighters Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

NFPA Ratings: Health 0, Flammability 1, Reactivity 0
HMIS Ratings: Health 0, Flammability 1, Physical Hazard 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures 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

Handling Precautions Slippery when wet. Avoid creating or inhaling dust.

Storage Information Store away from oxidizers. Store in a cool, dry location. Product has a shelf life of 6 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area.

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, AS/NZS 1715:2009, 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

Physical State:	Powder
Color:	White to yellow
Odor:	Slight
pH:	5.5-8.5
Specific Gravity @ 20 C (Water=1):	1.6
Density @ 20 C (lbs./gallon):	Not Determined
Bulk Density @ 20 C (lbs/ft3):	52.4
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):	1,000,000

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.
------------------------------------	----------------------------------

Symptoms related to exposure

Acute Toxicity	
Inhalation	May impede respiration.
Eye Contact	May cause mild eye irritation.
Skin Contact	None known.

Ingestion

None known

Chronic Effects/Carcinogenicity

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

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Xanthan gum	11138-66-2	> 5000 mg/kg (Rat) > 45000 mg/kg (Rat)	No data available	> 21 mg/L (Rat) > 5.25 mg/L (Rat)

12. ECOLOGICAL INFORMATION**Ecotoxicological Information****Ecotoxicity Product****Acute Fish Toxicity:** TLM96: 320-560 ppm (Oncorhynchus mykiss)**Acute Crustaceans Toxicity:** TLM96: > 75000 ppm (Mysidopsis bahia)**Acute Algae Toxicity:** Not determined**Ecotoxicity Substance**

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Xanthan gum	11138-66-2	No information available	TLM96: 320-560 ppm (Oncorhynchus mykiss)	No information available	TLM96: > 75000 ppm (Mysidopsis bahia)

12.2. Persistence and degradability

Readily biodegradable

Substances	CAS Number	Persistence and Degradability
Xanthan gum	11138-66-2	Readily biodegradable

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Xanthan gum	11138-66-2	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**

Bury in a licensed landfill according to federal, state, and local regulations.

Contaminated Packaging

Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION**US DOT****UN Number:** Not restricted**UN Proper Shipping Name:** Not restricted**Transport Hazard Class(es):** Not applicable**Packing Group:** Not applicable

US DOT Bulk
DOT (Bulk) Not applicable

Canadian TDG ul0
UN Number: Not restricted
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable

IMDG/IMO
UN Number: Not restricted
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable

IATA/ICAO
UN Number: Not restricted
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable
Special Precautions for User: None

15. REGULATORY INFORMATION

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

EPA SARA Title III Extremely Hazardous Substances Not applicable

EPA SARA (311,312) Hazard Class None

EPA SARA (313) Chemicals This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund Reportable Spill Quantity Not applicable.

EPA RCRA Hazardous Waste Classification If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65 All components listed do not apply to the California Proposition 65 Regulation.

MA Right-to-Know Law Does not apply.

NJ Right-to-Know Law One or more components listed.

PA Right-to-Know Law Does not apply.

Canadian Regulations

Canadian DSL Inventory All components listed on inventory or are exempt.

WHMIS Hazard Class 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

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*****