



WYO-BEN, INC.

SAFETY DATA SHEET

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: **FLOWMASTER® LV**
Chemical Family: Polyanionic Cellulose
Application: Drilling Fluid Additive
Manufacturer/Supplier: Wyo-Ben, Inc.
1345 Discovery Drive
Billings, MT 59102 USA
Telephone: 800.548.7055
Facsimile: 406.656.0748
Emergency Phone Number CHEMTREC® 800.424.9300

SECTION 2 — HAZARD IDENTIFICATION

Hazard Classification: Combustible Dust
Signal Word: Warning
Hazard Statements: May form combustible dust concentrations in air.
Hazard Symbol: None
Precautionary Statements: None
Hazards Not Otherwise Classified: None known

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

No hazardous ingredients

Component	CAS-No.	Weight %
Sodium Carboxymethylcellulose	9004-32-4	95 - 99

SECTION 4 — FIRST AID MEASURES

General advice: No hazards which require special first aid measures.
Inhalation: If breathed in, move person into fresh air. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
Skin: First aid is not normally required, however, it is recommended that exposed areas be cleaned by washing with soap and water.
Eyes: Remove contact lenses and flush eyes with plenty of water, including under eye lids. Get medical attention if irritation develops and persists.

Ingestion:	The product is not considered toxic. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed:	No symptoms known or expected.
Notes to physician:	No hazards which require special first aid measures.

SECTION 5 — FIRE FIGHTING MEASURES

Suitable Fire Extinguishing Media:	All standard firefighting media.
Unsuitable Media:	None.
Specific hazards during firefighting:	Organic dusts at sufficient concentration can form explosive mixtures in air. Do not allow run-off from firefighting to enter drains or water courses.
Special Exposure Hazards:	CAUTION! Extremely slippery when wet.
Special Protective Equipment for Firefighters:	Wear self-contained breathing apparatus.
NFPA Ratings:	Health 0, Flammability 1, Reactivity 0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures:	Avoid dust formation. Avoid breathing dust. Material can create slippery conditions. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Environmental Precautionary Measures:	Prevent further leakage or spillage if safe to do so. Do not allow product to contaminate surface water systems.
Procedure for Cleaning/Absorption:	Clean up promptly using dust free method. Keep in suitable, closed containers for disposal. Dispose in accordance with all local, state and federal regulations.

SECTION 7 — HANDLING AND STORAGE

Handling Precautions:	Avoid dust formation. Avoid dust formation. Ensure all equipment is electrically grounded and bonded before beginning transfer operations. The material can accumulate static charge and can therefore cause electrical ignition of flammable atmospheres. Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8. Maintain good housekeeping. Do not permit dust layers to accumulate, for example, on floors, ledges, and equipment, in order to avoid any potential for dust explosion hazards. For further guidance on prevention of dust explosions, refer to National Fire Protection Association (NFPA) 654: "Standard for the Prevention of Fire and Dust Explosions, from the Manufacturing, Processing and Handling of Combustible Particulate Solids".
Conditions for Safe Storage:	Do not smoke when working with product. Electrical installations / working materials must comply with the technological safety standards.
Storage Information:	Keep in a dry cool place (0 - 30 °C). Do not allow to freeze. Freezing will affect product physical condition and may damage the material.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	Provide appropriate exhaust ventilation at places where dust is formed. General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.
<u>Personal Protective Equipment</u>	
Respiratory Protection:	No personal respiratory protective equipment normally required.
Skin and body protection:	Wear as appropriate: Safety shoes, Chemical resistant gloves (consult your safety equipment supplier).
Eye Protection:	Safety glasses with side-shields.
Other Precautions:	Avoid breathing dust. Wash hands and face before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Powdered solid
Color:	Off- white
Odor:	None
pH:	6.5 – 8.5 (0.5% aqueous solution)
Specific Gravity @ 20 C (Water=1):	Approximately 1.59
Bulk Density @ 20 C (kg/m ³):	Approximately 500 - 1000
Boiling Point/Range (F/C):	Not applicable
Freezing Point/Range (F/C):	Not applicable
Vapor Pressure @ 20 C (mmHg):	Not applicable
Vapor Density (Air=1):	Not applicable
Percent Volatiles:	Not determined
Evaporation Rate (Butyl Acetate=1):	Not applicable
Solubility in Water (g/100ml):	Soluble. Limited by viscosity.
Solubility in Solvents (g/100ml):	Not determined
VOCs (lbs/gallon):	Not determined
Viscosity, Dynamic @ 20 C (centipoise):	Not determined
Viscosity, Kinematic @ 20 C (centistrokes):	Not determined
Partition Coefficient/n-Octanol/Water:	Not determined
Flash Point/Range (F/C):	Not determined
Flash Point Method:	Not applicable
Autoignition Temperature (F/C):	Not determined
Flammability Limits in Air – Upper/Lower (%):	Not determined

SECTION 10 — STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Does not occur.
Conditions to Avoid:	Dust may form explosive mixture in air. UV light. Exposure to sunlight. Keep away from heat, flame, sparks and other ignition sources.
Incompatibility (Materials to Avoid):	Acids and bases. Oxidizing agents.
Hazardous Decomposition Products:	Thermal decomposition may produce oxides of carbon (COx) and nitrogen (NOx).
Additional Guidelines:	Not applicable

SECTION 11 — TOXICOLOGICAL INFORMATION

Principle Route of Exposure:	Inhalation, skin and eye contact and ingestion.
<u>Acute Toxicity</u>	Not classified based on available information.
Acute Inhalation toxicity:	LD50/Rat/> 5800 mg/l
Acute dermal toxicity:	LD50/Rabbit/> 2000 mg/kg.
<u>Skin Corrosion/Irritation</u>	Not classified based on available information.
<u>Serious eye damage/eye irritation</u>	Not classified based on available information.
Product dust may be irritating to eyes, skin and respiratory system.	
<u>Respiratory or skin sensitization</u>	
Skin sensitisation:	Not classified based on available information.
Respiratory sensitisation:	Not classified based on available information.
<u>Germ cell mutagenicity</u>	Not classified based on available information.
<u>Carcinogenicity</u>	Not classified based on available information. No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible, potential, known, anticipated or confirmed human carcinogen by IARC, OSHA or NTP.
<u>Reproductive toxicity</u>	Not classified based on available information.
<u>STOT - single exposure</u>	Not classified based on available information.
<u>STOT - repeated exposure</u>	Not classified based on available information.
<u>Aspiration toxicity</u>	Not classified based on available information.
Additional Information:	None

SECTION 12 — ECOLOGICAL INFORMATION

<u>Toxicity</u>	Fish:	LC50/Oncorhynchus mykiss (Rainbow Trout)/96 hr/ > 100 mg/l (static test) LC50/Lepomis macrochirus (Bluegill sunfish)/96 hr/ > 100 mg/l (static test)
Mobility (Water/Soil/Air):		Miscible in water. Keep from entering natural water systems.
Persistence/Degradability:		Slowly biodegradable

Bio-accumulation: Not determined
FLOWMASTER® LV
1.800.548.7055

SECTION 13 — DISPOSAL CONSIDERATIONS

Disposal Method:	Dispose in accordance with federal, state and local regulations.
Contaminated Packaging:	Empty container. Container can be landfilled or incinerated, in compliance with local, state and federal regulations.

SECTION 14 — TRANSPORT INFORMATION

Land Transportation

- DOT – Not classified as dangerous goods.
- Canadian TDG – Not classified as dangerous goods.
- ADR/RID – Not classified as dangerous in the meaning of these regulations

Air Transportation

- ICAO/IATA – Not classified as dangerous goods.

Sea Transportation

- IMDG/IMO – Not classified as dangerous goods.

SECTION 15 — REGULATORY INFORMATION

US Regulations

US TSCA Inventory	All components are either listed on the inventory or are exempt from listing. EPA SARA Title III Extremely Hazardous Substances
EPA SARA (311, 312) Hazard Class	Fire Hazard
EPA SARA (313) Chemicals	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
EPA CERCLA/Superfund	As product > 2,000,000 lbs (as Acrylamide, 1000 lbs) Reportable Spill Quantity
California Proposition 65	This product Does Not contains any chemical which is known to the State of California to cause cancer, birth defects or other reproductive harm.
Canadian Regulations	
Canadian DSL Inventory Class	All components are either listed on the inventory or are exempt from listing. WHMIS Hazard Class
	Not applicable, Non-hazardous

SECTION 16 — OTHER INFORMATION

Prepared	03/15/2018
Last Revision	03/15/2018

DISCLAIMER

All information presented herein is believed to be accurate; however, it is the user's responsibility to determine in advance of need that the information is current and suitable for their circumstances. No warranty or guarantee, expressed or implied is made by WYO-BEN, INC. as to this information, or as to the safety, toxicity or effect of the use of this product.