



WYO-BEN, INC.

SAFETY DATA SHEET

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: **WYO-VIS® LVP**
Chemical Family: Anionic water soluble polymer
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

This product does not require a hazard warning label in accordance with GHS criteria.

Hazard Symbol: None

Signal Word: None

Hazard Overview:

This type of product has a tendency to create dust if roughly handled. It does not burn readily but as with many organic powders, flammable dust clouds may be formed in air.

Contact with the eyes or skin may cause mechanical irritation. May cause some eye irritation which should cease after removal of the product.

May cause some irritation to the respiratory system if dust is inhaled.

Use NIOSH approved respirator as needed to mitigate exposure. Wear NIOSH-certified chemical goggles.

Avoid dust formation. Wear protective clothing.

Caution - Slippery when wet!

Potential health effects

Acute toxicity: No known acute effects.

Irritation / corrosion: Not irritating to eyes and skin.

Sensitization: Based on the ingredients, there is no suspicion of a skin-sensitizing potential.

Chronic toxicity: None known

Carcinogenicity: Based on the ingredients, there is no suspicion of a carcinogenic effect in humans.

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

Substance	CAS Number	Percent	ACGIH TLV-TWA	OSHA PEL-TWA
Metal Oxide	Trade secret	≥1%, ≤5%	None	6 to 0.8 mg/m3*

*The exposure limit is calculated from the equation, $80/(\%SiO_2)$, using a value of 100% SiO₂. Lower percentages of SiO₂ will yield higher exposure limits.

SECTION 4 — FIRST AID MEASURES

General advice: Remove contaminated clothing.

If inhaled: If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

If on skin: Wash thoroughly with soap and water. If irritation develops seek medical attention.

If in eyes: Wash affected eyes for at least 15 minutes under running water with eyelids held open and seek medical attention.

If swallowed: Rinse mouth and then drink plenty of water. Seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5 — FIRE FIGHTING MEASURES

Flash Point/Range (F):	Not applicable
Flash Point/Range (C):	Not applicable
Flash Point Method:	Not applicable
Autoignition Temperature (F):	Not applicable – does not autoignite.
Autoignition Temperature (C):	Not applicable – does not autoignite.
Flammability Limits in Air – Lower (%):	Not flammable
Flammability Limits in Air – Upper (%):	Not flammable
Fire Extinguishing Media:	Dry powder and foam
Unsuitable Extinguishing Media:	Water
Special Exposure Hazards:	CAUTION! extremely slippery when wet.
Special Protective Equipment for Firefighters:	Wear self-contained breathing apparatus (SCBA)

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures:	Wear appropriate PPE (see Sec. 8).
Environmental Precautionary Measures:	Do not allow product to contaminate drains or surface water systems.
Procedure for Cleaning/Absorption:	Avoid raising dust. Do not flush with water. Depending on volume, pick up with suitable appliance or contain with dust binding material and dispose of in suitable, closed containers. Non-sparking tools should be used.
Further information:	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Forms slippery surfaces with water.

SECTION 7 — HANDLING AND STORAGE

Handling

General advice: Breathing must be protected when large quantities are decanted without local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Forms slippery surfaces with water.

Protection against fire and explosion: Avoid dust formation. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (2013 Edition) for safe handling.

Storage

General advice: Store in unopened original containers in a cool and dry place. Avoid wet, damp or humid conditions, temperature extremes and ignition sources.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

Advice on system design: It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Respiratory protection: Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator.
Hand protection: Chemical resistant protective gloves
Eye protection: Safety glasses with side-shields.
Body protection: Light protective clothing

General safety and hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Wearing of closed work clothing is recommended. No eating, drinking, smoking or tobacco use at the place of work.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid, small beads
Color: Off-white
Odor: odorless
pH: 5-7 (0.01% aqueous solution)
Specific Gravity @ 20 C (Water=1): No data available
Bulk Density @ 20 C (KG/M³): Approximately 750
Boiling Point/Range (F): Not applicable
Boiling Point/Range (C): Not applicable
Freezing Point/Range (F): Not applicable
Freezing Point/Range (C): Not applicable

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):	Forms a viscous solution. Solubility limited by viscosity.
Solubility in Solvents (g/100ml):	Not determined

SECTION 10 — STABILITY AND REACTIVITY

Stability Data:	Stable under normal conditions
Hazardous Reactions:	None known. The product is not a dust explosion risk as supplied; however the build-up of fine dust can lead to a risk of dust explosions.
Conditions to Avoid:	Avoid extreme temperatures. Avoid humidity.
Incompatibility (Materials to Avoid):	Strong acids, bases and oxidizing agents.
Hazardous Decomposition Products:	No hazardous or thermal decomposition products if stored and handled as indicated. Thermal decomposition may produce oxides of carbon (COx) and nitrogen (NOx).
Corrosion to Metals:	No corrosive effect on metals
Oxidizing properties:	Not fire propagating

SECTION 11 — TOXICOLOGICAL INFORMATION

Primary Routes of Exposure:	Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.
Acute Toxicity:	No known acute toxicity
Oral Toxicity:	LD50/Rat/> 2000 mg/kg (OECD Guideline 401)
Primary Irritation Effect:	Non-irritating to skin (OECD Guideline 401) and eyes of rabbits.
Sensitization:	Based on the ingredients, there is no suspicion of a skin-sensitizing potential.
<u>Chronic Toxicity/Effects</u>	
Repeated dose toxicity:	Assessment of repeated dose toxicity: Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statement has been derived from the properties of the individual components.
Genetic toxicity:	Assessment of mutagenicity: Based on the ingredients, there is no suspicion of a mutagenic effect.
Carcinogenicity:	Assessment of carcinogenicity: Based on the ingredients there is no suspicion of a carcinogenic effect in humans.
Reproductive toxicity:	Assessment of reproduction toxicity: Based on the ingredients, there is no suspicion of a toxic effect on reproduction.
Teratogenicity:	Assessment of teratogenicity: No teratogenic effects reported.
Other Information:	The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.
Symptoms of Exposure:	The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

SECTION 12 — ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air): Miscible in water. Keep from entering natural water systems.

Persistence/Degradability: Not readily biodegradable

Ecotoxicological Information

Acute Fish Toxicity: LC50/ *Oncorhynchus mykiss* /96 hours > 100 mg/l
(under static conditions in the presence of 10 mg/L humic acid)

Acute Daphnia Toxicity: LC50/*Daphnia magna* (Water Flea)/48 hours > 100 mg/l

Other adverse effects: The product has not been tested. The statements on ecotoxicology have been derived from products of a similar structure and composition.

SECTION 13 — DISPOSAL CONSIDERATIONS

Disposal Method: Landfill or incinerate in accordance with federal, state and local regulations.

Contaminated Packaging: Rinse empty containers with water and use the rinse water to prepare additional working solutions. Container should be punctured to prevent unauthorized reuse and landfilled or incinerated, in compliance with local, state and federal regulations.

SECTION 14 — TRANSPORT INFORMATION

Land Transportation

DOT – Not classified as dangerous
Canadian TDG – Not classified as dangerous

Air Transportation

ICAO/IATA – Not classified as dangerous.

Sea Transportation

IMDG – Not classified as dangerous.

Other Transportation Information

Labels: None

SECTION 15 — REGULATORY INFORMATION

US Regulations

US TSCA Inventory Extremely All components are either listed on the inventory or are exempt from listing. EPA SARA Title III

Hazardous Substances Not applicable, non-hazardous

EPA SARA (311, 312)

Hazard Class Not applicable, Non-hazardous

EPA RCRA Hazardous Waste Classification

Not considered a hazardous waste as defined by 40 CFR 261.

California Proposition 65

WARNING! This product contains a chemical which is known to the State of California to cause cancer, birth defects or other reproductive harm.

Canadian Regulations

Canadian DSL Inventory
WHMIS Hazard Class

All components are either listed on the inventory or are exempt from listing.
Not applicable, Non-hazardous

SECTION 16 — OTHER INFORMATION

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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.