



# WYO-BEN, INC.

## SAFETY DATA SHEET

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: **BORZAN® D**  
Chemical Family: Biopolymer  
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  
Eye Irritant Category 2B  
Respiratory Irritant Category 4



Hazard Symbol:

Signal Word: **WARNING**

Hazard Statements: May form combustible dust concentrations in air.  
May cause eye irritation.  
May be harmful if inhaled.

Hazards Not Otherwise Classified: Extremely slippery when wetted.

### SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	Percent	ACGIH TLV-TWA	OSHA PEL-TWA	Notes
Xanthan Gum	11138-66-2	91-100	10 mg/m <sup>3</sup>	4 mg/m <sup>3</sup>	See <sup>a</sup> below

<sup>a</sup> OSHA limits may not adequately protect workers from respiratory sensitization. Exposure levels should be maintained as low as possible for the workers' protection. Refer to local regulations for specific requirements.

## SECTION 4 — FIRST AID MEASURES

General advice:	Do not leave the victim unattended.
Inhalation:	If unconscious, place in recovery position and seek medical advice. If symptoms of irritation or allergy develop, remove person from source of exposure to fresh air. If Keep respiratory tract clear. If symptoms persist, call a physician.
Skin:	First aid not normally needed. Wash off with soap and water. Use lotion if dryness occurs.
Eyes:	Remove contact lenses. Flush eyes with plenty of water, including under eye lids. Seek medical attention if irritation persists.
Ingestion:	DO NOT INGEST. Keep respiratory tract clear. While this product is not toxic by ingestion, swallowing small amounts could cause complete blockage of the mouth, pharynx, trachea, esophagus and/or gastrointestinal system which may cause choking, suffocation and/or other life-threatening medical conditions. Get medical attention immediately. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

## SECTION 5 — FIRE FIGHTING MEASURES

Fire Extinguishing Media:	Carbon dioxide (CO <sub>2</sub> ) or dry chemical. Avoid water spray. Wet product can be extremely slippery.
Special Exposure Hazards:	Caution, extremely slippery if wetted.
Special Protective Equipment for Firefighters:	Wear self-contained breathing apparatus for firefighting if necessary.
Additional Information:	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire and explosion protection:	Provide appropriate exhaust ventilation at places where dust is formed.
Thermal decomposition:	May produce oxides of carbon (CO <sub>x</sub> ) and nitrogen (NO <sub>x</sub> ).
NFPA Ratings:	Health 0, Flammability 1, Reactivity 0

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures:	Avoid creating and breathing dust. Surfaces may become slippery after spillage if wetted. Eliminate ignition sources. Combustible Dust in Industry: Preventing and Mitigating the Effects of Fire and Explosions. Safety and Health Information Bulletin. SHIB 07-31-2005; updated 11-12-2014. <a href="https://www.osha.gov/dts/shib/shib073105.html">https://www.osha.gov/dts/shib/shib073105.html</a>
Environmental Precautionary Measures:	Avoid unintentional release to the environment.
Procedure for Cleaning/Absorption:	Do not flush with water. Collect dry in a manner to minimize the generation of airborne dust or vacuum with an explosion proof high vacuum cleaner. Use non-sparking tools. Keep in suitable, closed containers for disposal.

## SECTION 7 — HANDLING AND STORAGE

Handling Precautions:	Use only with adequate ventilation. Avoid formation and accumulation of dust For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Do not use in the presence of open flames, hot surfaces or other sources of
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ignition. Dry powders can build static electricity which can discharge causing fire or explosion. Provide appropriate exhaust ventilation at places where dust is formed to avoid dust build up and protect against fire and explosion.

Storage Information:

Keep containers closed and store in cool dry area when not in use.

## SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** Use explosion proof local exhaust ventilation as needed to maintain exposure concentrations below the recommended limits. Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

### Personal Protective Equipment

**Respiratory Protection:** Wear a supplied-air NIOSH approved respirator if dust concentrations exceed the Threshold Limit Values (TLV) Select appropriate respiratory protection for respirable particulates based on consideration of the airborne workplace concentrations and duration of exposure. Select and use respirators in accordance with 29 CFR 1910.134, ANSI Z88.2, the NIOSH Respirator Decision Logic and good industrial hygiene practice.

**Hand Protection:** Protective work gloves

**Skin Protection:** Wear as appropriate: Lightweight protective clothing; Safety shoes.

**Eye Protection:** Dust goggles recommended for dusty conditions.

**Other Precautions:** 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:	Solid powder
Color:	White to tan
Odor:	Slight
pH:	Not applicable
Specific Gravity @ 20 C (Water=1):	Approximately 1.4 – 1.6
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:	0
Evaporation Rate (Butyl Acetate=1):	Not applicable
Solubility in Water (g/100ml):	Completely soluble
Solubility in Solvents (g/100ml):	Not determined
VOCs (lbs/gallon):	0

Viscosity, Dynamic @ 20 C (centipoise):	Not determined
Viscosity, Kinematic @ 20 C (centistrokes):	Not determined
Partition Coefficient/n-Octanol/Water:	Not determined
Molecular Weight (g/mole):	Not determined
Flash Point/Range (F/C):	Not applicable
Flash Point Method:	Not applicable
Autoignition Temperature (F/C):	Not determined
Upper Explosion Limit:	No data available
Lower Explosion Limit:	1.06g/ft <sup>3</sup>

## SECTION 10 — STABILITY AND REACTIVITY

Reactivity	Not reactive
Stability Data:	This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Conditions to Avoid:	High heat, flames and sparks. Avoid contact with strong oxidizing agents.
Hazardous Decomposition Products:	Thermal decomposition may produce carbon and nitrogen oxides.

## SECTION 11 — TOXICOLOGICAL INFORMATION

### Principle Route of Exposure

Inhalation:	Inhalation of dust may cause irritation of the nose, throat and respiratory passages. Symptoms include coughing, sore throat, nasal congestion, sneezing, wheezing and shortness of breath.
Skin Contact:	May cause dryness.
Eye Contact:	May cause irritation.
Ingestion:	Ingesting small amounts could cause complete blockage of the mouth, pharynx, trachea, esophagus and/or gastrointestinal system which may cause choking, suffocation and/or other life-threatening medical conditions.

### Toxicity

Acute Oral Toxicity:	Oral rat LD50: 45,000 mg/kg
Acute Dermal Toxicity:	LD50 not known
Inhalation Toxicity:	LC50 not known
Aspiration Toxicity:	No aspiration toxicity classification
Carcinogenicity:	None of the components of this product are listed as carcinogens or suspected carcinogens by OSHA, IARC or NTP.
Genotoxicity:	No data available. This product is not expected to cause mutagenic activity.
Reproductive/Developmental Toxicity:	No data available. Not expected to cause adverse reproductive or developmental effects.
Specific Target Organ Toxicity (SE):	No data available
Specific Target Organ Toxicity (RE):	Prolonged overexposure to any nuisance dust may cause lung injury. Symptoms include cough, shortness of breath and reduced pulmonary function.

## SECTION 12 — ECOLOGICAL INFORMATION

Toxicity:	No data available. Not expected to be toxic to aquatic organisms.
Mobility (Water/Soil/Air):	No mobility in soil expected. Keep from entering natural water systems.
Persistence/Degradability:	No data available but expected to be biodegradable.
Bio-accumulation:	Not expected to bio-accumulate
Other Information:	No data available

## SECTION 13 — DISPOSAL CONSIDERATIONS

The information in this MSDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. If it must be discarded this material may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Disposal Method:	Dispose in accordance with federal, state and local regulations.
Contaminated Packaging:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14 — TRANSPORT INFORMATION

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition). Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.). Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the MSDS and the bill of lading.

### Land Transportation

US DOT – Not regulated as hazardous material or dangerous goods for transportation by this agency.

ADR/RID – Not regulated as hazardous material or dangerous goods for transportation by this agency.

### Sea Transportation

IMDG/IMO – Not regulated as hazardous material or dangerous goods for transportation by this agency.

## SECTION 15 — REGULATORY INFORMATION

### US Regulations

US TSCA Inventory	All components are listed on the inventory.
EPA SARA (302) Extremely Hazardous Substances	This material does not contain any components that are subject to 40CFR Section 302.
EPA SARA (304)	This material does not contain any components that are subject 40CFR Section 304.
EPA SARA (311, 312)	Hazard Classification: Fire Hazard; Acute Health
EPA SARA (313) Chemicals	This product does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels under 40CFR Section 313.
EPA CERCLA/Superfund	This material does not contain any components that are subject to CERCLA reporting requirements.
EPA RCRA Hazardous Waste Classification	This material, if discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40CFR261).
California Prop 65:	This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

### Canadian Regulations

Canadian DSL Inventory	All components are listed on the inventory or are exempt.
Canadian WHMIS	Class D-2-A

### Australian Regulations

Australian AICS	All components are listed on the inventory or are exempt.
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## SECTION 16 — OTHER INFORMATION

Prepared: 01/10/2013

Last Revision: 03/21/2019

## 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.