



WYO-BEN, INC.

SAFETY DATA SHEET

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: **UNI-DRILL®**
Chemical Family: Cellulose ether with proprietary suspending agent
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: OSHA Combustible Liquid
GHS Flammable Liquid (Category 4)

Signal Word: Warning

Hazard Statements: Combustible liquid

Hazard Symbol: None

Precautionary Statements: Keep away from heat/sparks/open flames/hot surfaces.
Wear protective gloves/protective clothing/eye protection/face protection.
In case of fire use dry sand, dry chemical, alcohol resistant foam or carbon dioxide for extinction.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container to an approved waste disposal plant.
NOTE: Spills may result in extremely slippery surfaces.

Carcinogenicity: No ingredient of this product present at levels greater than or equal to 0.1% is known or anticipated or identified as probable, possible, potential or confirmed human carcinogen by IARC, NTP or ACGIH.

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	Percent
C12-C14 Isoalkanes	68551-19-9	0 – 60
Distillates (petroleum), hydrotreated light	64742-47-8	0 - 60
Polymerization bottoms	64741-71-5	0 - 60

SECTION 4 — FIRST AID MEASURES

General Advice:	No hazards which require special first aid measures.
Inhalation:	If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
Skin:	Wash immediately with plenty of soap and water. Thoroughly launder contaminated clothing before reuse.
Eyes:	Immediately flush eyes with plenty of water, including under eye lids. Remove contact lenses. Get medical attention if irritation persists.
Ingestion:	Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

SECTION 5 — FIRE FIGHTING MEASURES

Flash Point/Range (F):	170.1 °F
Flash Point/Range (C):	76.7 °C
Flash Point Method:	Tag closed cup
Autoignition Temperature (F):	No data available
Autoignition Temperature (C):	No data available
Flammability Limits in Air – Lower (%):	No data available
Flammability Limits in Air – Upper (%):	No data available
Fire Extinguishing Media:	Dry sand, dry chemical, alcohol resistant foam or carbon dioxide (CO ₂)
Unsuitable Extinguishing Media:	High volume water jet.
Special Exposure Hazards:	Caution, extremely slippery if wetted.
Special Protective Equipment for Firefighters:	Wear self-contained breathing apparatus for firefighting if necessary.
Further information:	For safety reasons, cans should be stored separately in closed containers in case of fire. Use a water spray to cool fully closed containers.
Fire and explosion protection:	Do not spray on an open flame or any other incandescent material. Keep away from open flames, hot surfaces and sources of ignition.
NFPA Ratings:	Health 1, Flammability 1, Reactivity 0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures:	No special precautions required
Environmental Precautionary Measures:	Prevent further leakage or spillage if safe to do so. Do not allow product to contaminate water systems. Notify authorities if water system contamination occurs.
Procedure for Cleaning/Absorption:	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

SECTION 7 — HANDLING AND STORAGE

- Handling Precautions:** Avoid formation of aerosol. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with regulations.
- Storage Information:** Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. No smoking. Keep away from open flames, hot surfaces and sources of ignition.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients	Basis	Value	Control parameters	Note
C12-C14 Isoalkanes	Manufacturer	TWA	1,200 mg/m ³	

- Engineering Controls:** Use adequate ventilation to control airborne concentrations below the exposure guidelines/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 NIOSH approved air-purifying respirator for organic vapors that provides protection when working with this material if exposure to harmful levels of airborne material may occur. Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known or other circumstances exist where air-purifying respirators may not provide adequate protection.
- Hand Protection:** The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough..
- Skin Protection:** Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear as appropriate: Protective suit. Safety shoes.
- Eye Protection:** Tightly fitting safety goggles. Do not wear contact lenses where this product is used.
- 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:** Liquid
- Color:** White to off-white, cloudy

Odor:	Hydrocarbon
pH:	6.9
Specific Gravity @ 20 C (Water=1):	Approximately 1.05
Density @ 20 C (lbs/gallon):	Approximately 7.51
Bulk Density @ 20 C (lbs/ft ³):	Approximately 56.2
Boiling Point/Range (F):	423 - 459 °F
Boiling Point/Range (C):	217 - 237 °C
Freezing Point/Range (F):	Not determined
Freezing Point/Range (C):	Not determined
Vapor Pressure @ 20 C (mmHg):	Not determined
Vapor Density (Air=1):	3
Percent Volatiles:	Not determined
Evaporation Rate (Butyl Acetate=1):	1
Solubility in Water (g/100ml):	Approximately 0.5
Solubility in Solvents (g/100ml):	Not determined
VOCs (lbs/gallon):	Not determined
Viscosity, Dynamic @ 20 C (centipoise):	Not determined
Viscosity, Kinematic @ 20 C (centistrokes):	99,447 Partition
Coefficient/n-Octanol/Water:	Not determined
Molecular Weight (g/mole):	Not determined

SECTION 10 — STABILITY AND REACTIVITY

Stability Data:	This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Hazardous Polymerization:	None known.
Conditions to Avoid:	Heat, flames and sparks.
Incompatibility (Materials to Avoid):	May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Hazardous Decomposition Products:	Thermal decomposition may produce oxides of carbon (COx) and nitrogen (NOx).
Other data:	No decomposition if stored and applied as directed.

SECTION 11 — TOXICOLOGICAL INFORMATION

Principle Route of Exposure

Inhalation:	Aliphatic hydrocarbon vapor in areas of insufficient ventilation causing dizziness.
Skin Contact:	No skin irritation.
Eye Contact:	No eye irritation.

Ingestion:	No affects known.
Aggravated Medical Conditions:	No affects known.
Chronic Effects/Carcinogenicity:	No affects known.
Other Information:	Not a skin sensitizer.
Toxicity Tests	
Acute Oral Toxicity:	Acute toxicity estimate: >5000 mg/kg Method: Calculation method.
Acute Dermal Toxicity:	Acute toxicity estimate: >2000 mg/kg Method: Calculation method
Acute Inhalation Toxicity:	This information is not available.
Skin Irritation:	No skin irritation.
Eye Irritation:	No eye irritation.
Sensitization:	Not a skin sensitizer.
Repeated Dose Toxicity: C12-C14 Isoalkanes	Species: Monkey; Application route: Inhalation; Dose: 0, 654 ppm; Exposure time: 4 wk; Exposure: 6 h/d, 3d/wk; NOEL: >654 ppm Species: Rat, male and female; Application route: oral gavage; Dose: 0, 25, 150, 1000 mg/kg/d; Exposure time 4 wk daily; NOEL: >1000 mg/kg/d; Information given is based on data obtained from similar substances.
Primary Irritation Effect:	Not determined
Carcinogenicity:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Genotoxicity:	Not determined
Reproductive Toxicity: C12-C14 Isoalkanes	Species: Rat; Sex: male; Application Route: oral gavage; Dose: 0, 750, 1500, 3000 mg/kg/bw/d; Number of exposures: daily; Test period: 90 d; Method: OECD Test Guideline 415; NOAEL Parent: >= 3000 mg/kg/bw/d. Information given is based on data obtained from similar substances. Species: Rat; Sex: female; Application Route: oral gavage; Dose: 0, 750, 1500 mg/kg/bw/d; Number of exposures: daily; Test period: 90 d; Method: OECD Test Guideline 415; NOAEL Parent: >= 1500 mg/kg/bw/d; NOAEL F1: 750 mg/kg/bw/d. Information given is based on data obtained from similar substances. Species: Rat; Sex: male and female; Application Route: inhalation (vapor); Dose: 100, 300 ppm; Number of exposures: 6 h/d/5d/wk; Test period: 8 wk; Method: OECD Guideline 421; NOAEL Parent: >= 300 ppm; NOAEL F1: >= 300 ppm; Information given is based on data obtained from similar substances.
Developmental Toxicity: C12-C14 Isoalkanes	Species: Rat; Application Route: Inhalation; Dose: 100, 300 ppm; Exposure time: GD 6-15; Number of exposures: 6 h/d; NOAEL Teratogenicity: ≥ 300 ppm. Information given is based on data obtained from similar substance. Species: Rat; Application Route: Inhalation; Dose: 300, 900 ppm; Exposure time: GD 6-15; Number of exposures: 6 h/d; Method: OECD Guideline 414; NOAEL Teratogenicity: ≥ 900 ppm; NOAEL Maternal: ≥ 900 ppm. Information given is based on data obtained from similar substance.

Species: Rat; Application Route: oral gavage; Dose: 0, 500, 1000, 1500 mg/kg/d; Exposure time: GD 6-15; Number of exposures: daily; Method: OECD Guideline 414; NOAEL Teratogenicity: 1000 mg/kg; NOAEL Maternal: 500 mg/kg ppm. Information given is based on data obtained from similar substance.

Aspiration Toxicity: No aspiration toxicity classification.

CMR Effects:
C12-C14 Isoalkanes

Carcinogenicity: Not available
Mutagenicity: Test on bacterial or mammalian cell cultures did not show mutagenic effects. In vivo tests did not show mutagenic effects.
Teratogenicity: Animal testing did not show any effects on fetal development.
Reproductive toxicity: No adverse effects expected.

SECTION 12 — ECOLOGICAL INFORMATION

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

Persistence/Degradability: No data available but expected to be biodegradable.

Hydrolysis: Not determined

Bio-accumulation: Not determined

Ecotoxicological Information

C12-C14 Isoalkanes

Acute Fish Toxicity: LL50: >1,000 mg/l; Exposure time: 96 h; Species: *Oncorhynchus mykiss* (rainbow trout), semi-static test Method: OECD Test Guideline 203. Information given is based on data obtained from similar substances.

Acute Daphnia Toxicity: EL50: >1,000mg/l; Exposure time: 48 hr; Species: *Daphnia magna* (water flea), static test Method: OECD Test Guideline 202. Information given is based on data obtained from similar substances.

Acute Algae Toxicity: EL50: >1,000mg/l; Exposure time: 48 hr; Species: *Pseudokirchneriella subcapitata* (green algae), static test Method: OECD Test Guideline 201. Information given is based on data obtained from similar substances.

Biodegradability: Taking into consideration the properties of several ingredients, the product is estimated not to be readily biodegradable according to OECD classification.

Ecotoxicology Assessment

Acute aquatic toxicity

Polymerization bottoms: This product has no known ecotoxicological effects.

Chronic aquatic toxicity

Polymerization bottoms: This product has no known ecotoxicological effects.

Results of PBT assessment

C12-C14 Isoalkanes: Non-classified PBT substance, Non-classified vPvB substance

Polymerization bottoms: Non-classified PBT substance, Non-classified vPvB substance

Additional ecological information: This material is not expected to be harmful to aquatic organisms

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: Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated Packaging: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

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 SDS and the bill of lading.

Land Transportation

US DOT – Not regulated as hazardous material or dangerous goods for transportation by this agency. Testing (ASTM D4206) has shown product does not sustain combustion.

ADR - Not regulated as hazardous material or dangerous goods for transportation by this agency.

Air Transportation

IATA – Not regulated as hazardous material or dangerous good for transportation by this agency.

Sea Transportation

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

Inland Waterways

ADN - Not regulated as hazardous material or dangerous goods for transportation by this agency.

Other Transportation Information

None

SECTION 15 — REGULATORY INFORMATION

US Regulations

US TSCA Inventory All components are either listed on the inventory or are exempt from listing.

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)	Flammable (gases, aerosols, liquids, or solids)
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).
Pennsylvania Right to Know:	No components are subject to the Pennsylvania Right to Know Act.
New Jersey Right to Know:	No components are subject to the New Jersey Right to Know Act.
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 either listed on the inventory or are exempt from listing.
WHMIS Hazard Class	Combustible Liquid

Australian Regulations

Australian AICS	All components are either listed or in compliance with the inventory.
-----------------	---

SECTION 16 — OTHER INFORMATION

Prepared: 01/10/2013
 Last Revision: 08/14/2018

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.