Blackstone DRILLING FLUIDS LIMITED
Suite 500, 215 9th Avenue SW, Calgary, AB T2P 1K3

Safety Data Sheet

Section 1. Identification		
Product Identifier	BLACKSTONE AE 851	**Version: 1** **Effective Date: 2025/06/25**
Other Means Of Identification	None	
Initial Supplier Identifier	Blackstone Drilling Fluids Limited Suite 700, 215 - 9th Avenue SW Calgary, AB T2R 1K3 Tel: 403-262-5955	
Recommended Use and Restrictions On Use	Drilling fluid additive. No restrictions.	
Product Family	Not available	
24 Hour Emergency	Contact 403.262.5955. Restrictions: business hours Monday – Friday 8:00AM-4:00PM MST. After business hours you will be forwarded to an on-call service which may be unreachable.	

Section 2. Hazard Identification	
Hazard Classification	Not hazardous
Health Hazard	Not hazardous
Signal Word	None
Hazard Statement	No known significant effects or critical hazards.
Precautionary Prevention Statement	Not hazardous
Precautionary Response Statement	Not hazardous
Precautionary Storage Statement	Store in well-ventilated place.
Precautionary Disposal Statement	Dispose of contents/container to an approved waste disposal plant.
Other Hazards	Spills produce extremely slippery surfaces

Section 3. Composition / Information on Ingredients			
Chemical Name	**Common Name or Synonyms**	**CAS NO. and Other Unique Identifiers**	**% by weight**
Distillates (petroleum), hydrotreated light		64742-47-8	20 - 45
Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched		69011-36-5	< 5%
Balance ingredients are a non-hazardous blend.			

Section 4. First-Aid Measures	
Eye Contact	Flush eyes with water for 15 minutes. Seek medical attention.
Skin Contact	Wash with water and soap.
Inhalation	Remove victim to fresh air. If there is difficulty breathing, seek immediate medical attention.
Ingestion	Rinse mouth with water if conscious. Do not induce vomiting. Lay victim on left side to prevent aspiration of any vomit. Seek immediate medical attention.
Most Important Symptoms and Effects Both Acute and Delayed	Product is not hazardous.
Immediate Medical Attention and Special Treatment	None required.

Section 5. Fire-Fighting Measures	
Suitable and Unsuitable Extinguishing Media	Water. Water spray. Foam. Carbon dioxide (CO2). Dry powder.
Hazardous Combustion Products	Thermal decompositions may produce nitrogen oxides (Nox), carbon oxides (COx). Ammonia (NH3). Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.
Specific Hazards Arising From the Product	Spills produce extremely slippery surfaces.
Special Protective Equipment and Precautions for Firefighters	Fire-fighters should wear self-contained breathing apparatus and full protective clothing.

Section 6. Accidental Release Measures	
Personal Precautions, Protective Equipment and Emergency Procedures	Gloves, safety glasses and footwear suitable for workplace. Evacuate all unnecessary personnel.
Environmental Precautions	This material is considered non-hazardous. Large volumes, however, should not be allowed to enter the surface water system.
Methods and Materials For Containment and Clean-Up	Small spills: Do not flush with water. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. Large spills: Do not flush with water. Dam up. Soak up with inert absorbent material. Clean up promptly by scoop or vacuum. Residues: After cleaning, flush away traces with water.

Section 7. Handling and Storage	
Precautions For Safe Handling	Handle with care
Conditions For Safe Storage	Keep containers closed when not in use.

Section 8. Exposure Controls and Personal Protection	
Control Parameters Distillates (petroleum), hydrotreated light 200 mg/m^3 (8 hours) – 25- mg/m^3 (15 minutes) (vapours)	
Exposure Controls	Local exhaust ventilation
Appropriate Engineering Controls	Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

Individual Protective Measures	
Eye / Face Protection	Safety glasses with side-shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)
Skin Protection	Hand protection: PVC or other plastic material gloves. Be aware that liquid may permeate gloves, frequent change is advised. Suitable gloves can be recommended by the glove supplier. The selected protective gloves have to satisfy the specifications of EU Directive 89/689 EEC and the standard EN 374 derived from it. Other: Wear coveralls and/or chemical apron and rubber footwear where physical contact can occur. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory Protection	Breathing apparatus needed only when aerosol or mist is formed. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties	
Appearance	Viscous liquid, Milky
Odour	Aliphatic
Odour Threshold	Not data
pH	Not applicable
Flash Point	Do not flash
Boiling Point and Boiling Range	>100ºC
Melting Point / Freezing point	< 5ºC
Evaporation Rate	No data
Flammability (solid, gas)	No data
Upper and Lower Flammability or Explosive Limits	Not expected to create explosive atmospheres
Vapour Pressure	2.3 kPa @ 20ºC
Vapour Density	0.804 g/L @ 20ºC
Relative Density	1.0 – 1.2
Solubility	Completely miscible.
Partition co-efficient, n-Octanol/Water	No data
Auto-ignition Temperature	No data
Decomposition Temperature	>150ºC
Viscosity	No data

Section 10. Stability and Reactivity	
Reactivity	Stable.
Chemical Stability	The product is stable
Possibility of Hazardous Reactions	Will not occur
Conditions to Avoid	Protect from frost, heat and sunlight
Incompatible Materials	Strong oxidisers.
Hazardous Decomposition Products	Not expected to decompose under normal conditions of use.

Section 11. Toxicological Information		
Component Toxicity		
Product as supplied:	LD50/oral/rat LD50/dermal/rat	> 5000mg/kg (Estimated) > 5000mg/kg (Estimated)
Distillates (petroleum), Hydrotreated light	LD50/oral/rat LD50/dermal/rabbit LC0/inhalation/4hrs/rat	> 5000mg/kg (OECD 401) > 5000mg/kg (OECD 402) >=4951mg/m3 (vapors) (OECD 403)
Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched	LD50/oral/rat LD50/dermal/rabbit	=500 – 2000 mg/kg > 2000 mg/kg
Likely Routes of Exposure		
Skin:	No hazard expected under normal conditions of use.	
Eyes:	No hazard expected under normal conditions of use.	
Inhalation:	No hazard expected under normal conditions of use.	
Ingestion:	Harmful effects not expected in small amounts.	
Acute Toxicity Estimates (ATE)	No data	
STOT (Specific Target Organ Toxicity) – Single Exposure	No hazard	
Aspiration Toxicity	No hazard	
STOT (Specific Target Organ Toxicity) – Repeated Exposure	No hazard	
Skin Corrosion / Irritation	No hazard	
Serious Eye Damage / Irritation	No hazard	

Respiratory or Skin Sensitization	None expected
Carcinogenicity	Not listed.
Reproductive Toxicity	
- **Sexual Function and Fertility**	Not hazardous
- **Development of Offspring**	Not hazardous
- **Effects on or via Lactation**	Not hazardous
Germ Cell Mutagenicity	Not hazardous
Interactive Effects	None
Other Information	N/A

Section 12. Ecological Information

Ecotoxicity

Product as supplied:	LC50/Danio rerio/96 hrs	> 100mg/L (Estimated)
	LC50/Oncorhynchus mykiss/96 hrs	> 100mg/L (Estimated)
	EC50/Daphnia magna/48 hours	> 100mg/L (Estimated)
	IC50/Algae/72 hours	> 100mg/L (Estimated)
Distillates (petroleum), Hydrotreated light:	LC50/Oncorhynchus mykiss/96 hrs	> 1000mg/L (Estimated)
	NOEC/Oncorhynchus mykiss/28 days	> 1000mg/L (Estimated)
	EC50/Daphnia magna/48 hours	> 1000mg/L (Estimated)
	EC50/Daphnia magna/21 days	> 1000mg/L (Estimated)
	IC0/Pseudokirchneriella subcapitata/72 hours	> 1000mg/L (Estimated)
	EC50/Tetrahymena pyriformis/48 hours	> 1000 mg/L
Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched	LC50/Cyprinus carpio/96 hrs	> 1-10mg/L (OECD203)
	EC50/Daphnia/48 hours	> 1-10mg/L (OECD202)
	NOEC/Daphnia magna/21 days	> 1 mg/L (OECD202)
	IC50/Desmodesmus subspicatus/72 hrs	> 1 mg/L (OCED201)
	IC0/Pseudokirchneriella subcapitata/72 hours	> 1000mg/L (Estimated)
	EC50/Tetrahymena pyriformis/48 hours	> 1000 mg/L

Persistence and Degradability	Not readily biodegradable.
Bioacumulative Potential	Not expected to bioaccumulate.
Biodegradability	Readily biodegradable.
Mobility in Soil	No data
Other Adverse Effects	N/A

Section 13. Disposal considerations	
Disposal Considerations	Dispose of contents / container in accordance with local regulations.

Section 14. Transport Information	
UN Number	None
UN Proper Shipping Name	None
Transport Hazard Class(es)	None
Packaging Group	None
Environmental Hazards	Not applicable
Bulk Transport	Not applicable
Special Precaution	Not applicable
DOT Erg#	Not applicable

Section 15. Regulatory Information	
Canada – DSL Inventory	All components of this product are on the Domestic Substances List (DSL)
TSCA	All components of this product are on the Toxic Substances Control Act (TSCA) Inventory List
Additional Information	None

Section 16. Other Information	
NFPA Rating	Health-0/ Flammability-0/Reactivity-0/Special Hazard-Not applicable
HMIS Rating	Health-0/Flammability-0/Reactivity-0/Personal Protection-See Section 8.
Prepared by:	Blackstone Drilling Fluids Ltd., Technical Department
Date Prepared:	2025/06/25
Date of Latest Revision:	

Disclaimer:
To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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