

### **Product Data Sheet**

#### Introduction

- ➤ UBDrill-144 EBL is a naturally-occurring, ester-based lubricant derived from natural fats and oils.
- It is non-toxic to humans or the surrounding environment.
- This product has a small impact on the rheological properties of drilling fluid, and property of environmentally friendly performance.

## **Typical Physical Properties**

Properties	Specification
Appearance	Light-Yellow liquid
Density, g/cm <sup>3</sup> @20°C	0.9-1.0
Kinematic viscosity @ 40°C(cst)	100Max
Pour Point, °C	<-20
Flash Point (COC), °C	200Min
Freshwater system torque reduction percentage (1%v/v), %	85Min
Seawater system torque reduction percentage (1%v/v), %	80Min

#### **Product features**

- ➤ Reduces torque and drag issues by providing lubricity to water-based drilling operations without compromising or damaging production zones.
- Readily dispersible in any water-based drilling fluid.
- Proven results in reducing friction factors while drilling open hole.
- ➤ Helps to prevent bit-balling and differentially stuck pipe; will have no negative effects on the fluid rheology or filtration properties.
- In most cases, will improve the overall API and HTHP fluid loss behaviors of the fluid.
- Avoid use in high pH environments.
- Initially 0.5-2.0% by volume of UBDrill-144 EBL should be added directly into the mud. The product should be continually added or injected into the mud when the bit is drilling. Freshwater system recommended dosage is 1%, seawater system recommended dosage is 1.5%.

## **Recommended Handling**

All personnel handling this material must handle it as an industrial chemical, wearing protective equipment and observing the precautions as described in the Material Safety Data Sheet.

# **Packaging and Storage**

175kg drum/4 drums/pallet. Store in dry, well-ventilated area. Keep container closed. Keep away from heat, sparks and flames. Store away from incompatibles.