

# **Bio-Rock Drill™ Oils**

(SAE 10W20, 10W30, 15W50, 20W60)

#### **Biobased Lubricants for Pneumatic Tools and Extreme-Load Applications**

Bio-Rock Drill™ Oils are high-performance, readily biodegradable lubricants designed to protect pneumatic equipment under severe operating conditions. Formulated with anti-wear, extreme pressure, rust, and oxidation inhibitors, these oils provide enhanced emulsification, superior boundary lubrication, and anti-misting properties. Powered by Stabilized™ HOBS (High Oleic Base Stock) technology, Bio-Rock Drill™ Oils offer superior shear stability, fluid film strength, and long-term protection in wet, high-shock environments.

#### **Benefits**

- Readily biodegradable, non-toxic, and not bioaccumulative
- Excellent adhesion and mist suppression for pneumatic applications
- Superior anti-wear, EP, and rust/corrosion protection
- Emulsifies water for improved lubricity in wet environments
- Ultra-high viscosity index for multi-grade synthetic-like performance
- Provides stable lubrication under heavy shock loads
- Exceeds acute toxicity standards (LC-50 / EC-50 > 1000 ppm)
- Compliant with EPA 2013 (Environmentally Acceptable Lubricant)

#### **Application / New Filling**

- Recommended for:
  - o Rock drills, jackhammers, and pneumatic tools
  - o EP gear lubrication (API GL-3)
  - o Steam cylinder oils, way lubricants, and non-drip oil applications
- Performs in both mobile and industrial settings where petroleum loss may pose environmental risk

### **Specifications and Approvals**

- ASTM D-5864: Ultimate Biodegradation/ OECD 301 Readily Biodegradable
- EPA VGP 2013 compliant (EAL designation)
- U.S. Patents: 6,383,992; 6,534,454 (with additional pending)
- Contains Stabilized™ HOBS for oxidative, thermal, and cold flow stability



## **Typical Specifications**

	ASTM	Medium	Heavy Medium	Heavy	Extreme Heavy
SAE Viscosity Grade		10W20	10W30	15W50	20W60
ISO Viscosity Grade		46	68	100	150
VISCOSITIES:	D-445				
@100°C., cSt.		8.65	12.0	18.2	26.1
@40°C., cSt.		43.74	62.9	95	147
Viscosity Index	D-2270	181	191	212	213
Flash Point, COC, OC	D-92	260	272	288	290
Pour Point, <sup>o</sup> C	D-97	-36	-33	-30	-24
Copper Strip Corrosion (3h@100°C)	D-130	1A	1A	1A	1A
4-Ball Wear (mm)	D-4172	0.30	0.30	0.30	0.30
4-Ball EP	D-2783				
Weld Point (kg)		250	250	250	250
Load Wear Index		47.86	47.86	47.86	47.86
Timken Load, OK Load (lbs)	D-2782	70	70	70	70
Rust Prevention	D-665				
A-Distilled water		Pass	Pass	Pass	Pass
B-Syn. Sea water		Pass	Pass	Pass	Pass
RLI Product Item #		83000	83010	83020	83030

