

# **Bio-E.P.™ Wire Rope Lubricants**

(ISO 32, 46, 68, 100, 150)

### Biobased, Extreme Pressure Lubricants for Wire Rope and Multi-Strand Cable Systems

Bio-E.P.™ Wire Rope Lubricants are readily biodegradable, biosynthetic-blend formulations designed for high-load cable and wire rope applications. These extreme pressure (EP) lubricants feature anti-wear, anti-rust, and oxidation inhibitors combined with a tackifier to provide lasting protection in demanding environments. A waxy, tacky coating ensures deep penetration into the core strands of the cable while forming a protective film against moisture, salt, and acid fumes. These lubricants outperform petroleum equivalents and are safer for both users and the environment.

#### **Benefits**

- Readily biodegradable, non-toxic, not bioaccumulative
- Excellent protection against rust, corrosion, galling, and seizure
- Deep strand penetration and residual waxy-tacky coating
- High viscosity index for improved pumpability in cold conditions
- Outperforms traditional lubricants in salt spray and humidity exposure
- No chlorine, zinc, lead, or heavy metals
- Compliant with EPA 2013 VGP for Environmentally Acceptable Lubricants (EALs)
- Exceeds LC-50 / EC-50 >1000 ppm toxicity standards

## **Application / New Filling**

- Designed for:
  - Wire rope and multi-strand cable systems
  - o Pulleys, sliding surfaces, steel chains, slideways, hinge pins
  - o Corrosive environments: salt air, acid fumes, and high humidity
- Apply via spray, brush, dip, drip, or pressure boot
- For optimal penetration, pre-warm to 30-40°C before use
- Shake or agitate if stored for extended periods (due to waxes)

## **Specifications and Approvals**

- EPA VGP 2013 (EAL Compliant)
- ASTM D-5864: Ultimately Biodegradable
- OECD 301 Readily Biodegradable
- Rust and corrosion protection: ASTM D-665, ASTM B-117, ASTM D-1748
- USDA Biopreferred with Stabilized™ HOBS technology





Typical Specifications						
ASTM		Light	Medium	Heavy Medium	Heavy	Extreme Heavy
SAE Viscosity Grade Replacement		10W20	10W30	15W40	15W50	20W60
ISO Viscosity Grade		32	46	68	100	150
VISCOSITIES:	D-445					
@100°C., cSt.		7.5	10.3	13.4	17.9	24.5
@40°C., cSt.		31.8	45.8	67.2	94.2	137.3
Viscosity Index	D-2270	216	222	206	210	212
Flash Point, COC, OC	D-92	224	230	272	278	282
Pour Point, <sup>o</sup> C	D-97	-32	-32	-30	-28	-23
4-Ball Wear (mm)	D-4172	0.40	0.35	0.35	0.35	0.35
4-Ball EP	D-2783					
Weld Point (kg)		400	400	450	450	450
Load Wear Index		47	55	58	58	58
Timken Load, OK Load (lbs)	D-2782	65	70	70	70	70
Rust Prevention						
A-Distilled water	D-665A	Pass	Pass	Pass	Pass	Pass
B-Syn. Sea water	D-665B	Pass	Pass	Pass	Pass	Pass
Cabinet Humidity	D-1748	>60 days	>60 days	>60 days	>60 days	>60 days
Salt Fog Corrosion	B-117	>60 hrs.	>60 hrs.	>60 hrs.	>60 hrs.	>60 hrs.
RLI Product Item #		82610	82620	82650	82630	82640

STABILIZED by Renewable Lubricants™\* is RLI's trademark on their proprietary and patented anti-oxidant, anti-wear, and cold flow technology. High Oleic Base Stock (HOBS) are agricultural oils. This Stabilized technology allows the HOBS to perform as a high-performance formula in high and low temperature applications, reducing oil thickening and deposits. Patented Product: US Patent 6,383,992, US Patent 6,534,454 with additional Pending and Foreign Patents ™ Trademark of Renewable Lubricants™, Inc. Copyright 1999 Renewable Lubricants, Inc.

Availability F.O.B.: Hartville, Ohio, USA 1 Gallon 5 Gallon Pail Drum Totes