

Overview ► BioLube WRL XT is a readily biodegradable, zinc-free wire rope lube formulated from renewable basestocks. The high lubricity base oil of BioLube WRLXT is paired with environmentally acceptable additive technologies and tackifier to deliver optimum wear protection, corrosion protection, and enhanced metal adhesion.



Wear Protection: Abrasive wear occurs inside and outside of wire ropes. Individual strands inside the rope move and rub against one another during normal loading creating internal 2-body abrasive wear. External rope surfaces accumulate dirt and contaminants from sheaves and drums during the spooling process causing 3-body abrasive wear eroding outer wires and strands, reducing rope diameter and resulting in core failure and internal wire breakage. BioLube WRL XT penetrates into wire ropes providing optimal metal wetting and friction reduction, while the superior solvency of the natural ester base oils cleans external surfaces to remove contaminants and dirt.

Corrosion & Environmental Protection: Rope corrosion and oxidation is caused by humidity, fumes, salt air or brines, acids, sulfur and gases which shorten rope life due to metal loss and pitting. BioLube WRL XT provides superior corrosion management, reducing the accelerated corrosion tied to elevated operating temperatures, delivering an optimal balance between base oil and additive system performance to minimize environmental impact.

BioLube WRL XT is formulated featuring our proprietary **eSyn™** technology.

Typical Properties ▼

| Property | ASTM Test Method | WRL XT |
|-------------------------------------|------------------|------------|
| Product Code | | BL7110046 |
| ISO Grade | | 46 |
| Specific Gravity | ASTM D1298 | 0.91 |
| Viscosity @40°C, cSt | ASTM D445 | 46 |
| Viscosity @100°C, cSt | ASTM D445 | 10 |
| Viscosity Index (VI) | ASTM D2270 | >200 |
| Pour Point °F (°C) | ASTM D97 | -10 (-23) |
| Flash Point °F (°C) | ASTM D92 | >500 (260) |
| Copper Corrosion | ASTM D4048 | 1A |
| Rust Test, A & B | ASTM D665 | Pass |
| 4 Ball Wear, Scar, mm | ASTM D4172 | <0.50 |
| Dielectric Breakdown Voltage, kV | ASTM D877 | >45 |
| Readily Biodegradable (meaning>60%) | | Pass |

| | | |
|--|------------|---------|
| Biodegradability, % | OECD 301B | 75 |
| Minimally Toxic | | Pass |
| Algae (EC 50), 72 hr, mg/L | OECD 201 | >32,000 |
| Daphnia (EC 50), 48 hr, mg/L | OECD 202 | >10,000 |
| Fish (LC 50), 96 hr, mg/L | OECD 203 | >40,000 |
| Not Bioaccumulative (Calculated value as per EPA standard) | | Pass |
| Bio-based Content, % | ASTM D6866 | >86 |

Key Attributes / Approvals ▶



- USDA BioPreferred Program
- Classified as Environmentally Acceptable Lubricants (EAL's) as per the EPA's 2013 U.S. Vessel General Permit (VGP)

See the Safety Data Sheet (SDS) for emergency, proper handling and disposal information.

Rev. WRLXT-01082021