

# Bio-Chain & Cable™ Lubricants

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

### High-Performance, Environmentally Acceptable Chain and Cable Lubricants

Bio-Chain & Cable™ Lubricants are readily biodegradable, biosynthetic-blend lubricants formulated with Anti-Wear/EP additives, corrosion inhibitors, and tackifiers for enhanced performance in heavy-duty chain and cable systems. These environmentally responsible lubricants provide excellent multi-metal protection and long-lasting boundary lubrication under shock loading conditions. The super high viscosity index from Stabilized™ HOBS ensures excellent cold temperature pumpability and superior adhesion to metal surfaces.

### Benefits

- Readily biodegradable, environmentally non-toxic, not bioaccumulative
- Enhanced corrosion protection with strong adhesion to metal
- Deep penetration and internal protection of cables and chains
- Contains no chlorine, zinc, or heavy metals
- Provides natural polarity to metal for improved film strength
- Outstanding oxidation resistance and thermal stability
- Excellent wear protection under high loads
- Compliant with EPA VGP 2013 (EAL Compliant)
- Exceeds LC-50 / EC-50 > 1000 ppm aquatic toxicity standards

### Application / New Filling

- Recommended for:
  - Chains, sprockets, cables under shock or heavy loading
  - Forestry, mining, agriculture, marine, rail and heavy industry
  - Pulp mills, sawmills, straddle lift carriers, draglines
  - Hoist cables, safety chains, motorcycle and ATV chains
- Field application by spray, brush, drip, dip, or pressure boot

### Specifications and Approvals

- EPA VGP 2013 compliant as Environmentally Acceptable Lubricants
- OECD 301 Readily Biodegradable
- ASTM D-5864: Ultimate biodegradation within 28 days (Pw1)
- Exceeds US EPA and Fish & Wildlife LC-50 / EC-50 toxicity criteria
- USDA Biopreferred and formulated with renewable biobased resources

**STABILIZED™**  
Renewable Lubricants

**ISOGREEN®**  
CERTIFIED LUBRICANTS 

## Typical Specifications

	ASTM	Light	Medium	Heavy Med	Heavy	Extreme Heavy
<u>ISO Viscosity Grade</u>		32	46	68	100	150
VISCOSITIES:	D-445					
@100°C., cSt.		6.9	8.65	12	18.2	26.1
@40°C., cSt.		34.1	43.74	62.9	95	147
Viscosity Index	D-2270	169	181	191	212	213
Flash Point, COC, °C	D-92	230	245	262	278	285
Pour Point, °C	D-97	-37	-36	-33	-30	-26
Copper Strip Corrosion (3h@100°C)	D-130	1A	1A	1A	1A	1A
4-Ball Wear (mm)	D-4172	0.4	0.30	0.30	0.30	0.30
4-Ball EP	D-2783					
Weld Point (kg)		400	400	400	400	400
Load Wear Index		55	55	55	55	55
Timken Load, OK Load (lbs)	D-2782	70	70	70	70	70
Rust Prevention	D-665					
A-Distilled water		Pass	Pass	Pass	Pass	Pass
B-Syn. Sea water		Pass	Pass	Pass	Pass	Pass
<b>RLI Product Item #</b>		<b>83090</b>	<b>83050</b>	<b>83060</b>	<b>83070</b>	<b>83080</b>

Patented Product: US Patent 6,383,992, US Patent 6,534,454 with additional Pending and Foreign Patents  
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**Availability F.O.B. :Hartville, Ohio, USA    1 Gallon   5 Gallon Pail   Drum   Totes   Bulk**