

Bio-Penetrating Lubricant™ (BPL™)

Biobased Multi-Functional Penetrant and Light Lubricant

Bio-Penetrating Lubricant[™] (BPL[™]) is a high-performance, readily biodegradable, biosynthetic-blend lubricant designed for precision penetration and light lubrication in military, industrial, marine, transportation, and agricultural applications. Formulated with Stabilized[™] HOBS (High Oleic Base Stock) technology, BPL[™] outperforms traditional petroleum penetrants by providing exceptional lubricity, moisture displacement, dielectric strength, and corrosion protection—without VOCs, heavy metals, or environmental hazards.

Benefits

- Readily biodegradable, non-toxic, not bioaccumulative
- Superior penetrating action in close tolerance areas
- Excellent rust, corrosion, and moisture displacement performance
- High dielectric strength (47 kV ASTM D-877)
- Non-staining, non-chlorinated, no VOCs or hazardous components
- Compliant with EPA 2013 VGP as Environmentally Acceptable Lubricant (EAL)
- Exceeds LC-50 / EC-50 > 1000 ppm acute toxicity standards
- Leaves a protective lubricating film that resists wear and oxidation

Application / New Filling

- Ideal for:
 - o Bolts, hinges, jacks, dies, shafts, chains, linkages
 - o Firearms, machine tools, air tools, locks, air valves
 - o Wire ropes and cable strands
 - o Assembly lubrication, corrosion prevention, metalworking protection
- Use in harsh indoor or outdoor environments

Specifications and Approvals

- EPA VGP 2013 Compliant (EAL)
- ASTM D-5864: Ultimate Biodegradation/OECD 301 Readily Biodegradable
- Contains patented Stabilized™ HOBS formulation
- U.S. Patents: 6,383,992; 6,534,454; 6,624,124; 6,620,772 (others pending)



Tools	Locks	Bearings	Bolts	
Jacks	Air Valves	Assembly Parts	Chains	
Wire ropes	Machine Tools	Hinges	Firearms	
Dies	Shafts	Linkage Cables	Air Tools	

Typical Data

Typical Bata		
Specific Gravity @60°F.	ASTM D-287	.88
Viscosity @40°C., cSt.	ASTM D-445	13.0
Flash Point, PMCC	ASTM D-93	295 ^o F
		(146°C)
Pour Point (Rotational)	ASTM D-5985	-30 ^o C
Four Ball Wear	ASTM D-2266	0.40 mm
Copper Corrosion Prevention	ASTM D-130	1A
Rust Prevention	ASTM D-665 A&B	Pass-Clean

Availability F.O.B.: Hartville, Ohio, USA

Size	<u>11 oz</u>	12oz.	1 Gal	5 Gal	<u>Drum</u>	<u>Totes</u>	<u>Bulk</u>	J
	<u>Aerosol</u>	<u>Spray</u>		<u>Pail</u>				
Item #	80002	80001	80003	80004	80006	80007	80009	

Renewable Lubricants offers many additional BPL™ products to meet your needs:

BPL™ Plus Moly + Tack (Chain & Cable Lubricant)

BPL™ Plus Moly with Tackifier has performance advantages in some applications such as high speed roller chains, cables, and moving parts. This product penetrates rapidly and adheres to the application, forming a lubricating film that cannot be wiped away by extreme pressures and high speeds. It protects metal surfaces from corrosion that are exposed to environmental conditions. The molybdenum disulfide (Moly) provides an extreme pressure lubricant that reduces friction and wear.

Availability F.O.B.: Hartville, Ohio, USA

Size	12oz. Spray	1 Gal	<u>5 Gal</u> <u>Pail</u>	<u>Drum</u>	<u>Totes</u>	<u>Bulk</u>
Item #	80301	80303	80304	80306	80307	80309

BPL™ Plus Moly (Chain & Cable Lubricant)

A specially formulated, Biobased, Penetrating Lubricant that provides a protective Moly film to sliding surfaces, but is more resistant to dust and dirt than the BPL™ products with tackifier.

Availability F.O.B.: Hartville, Ohio, USA

Size	12oz. Spray	1 Gal	<u>5 Gal</u> <u>Pail</u>	<u>Drum</u>	<u>Totes</u>	<u>Bulk</u>
Item #	80101	80103	80104	80106	80107	80109

<u>BPL</u>™ <u>Food Grade H1</u> (see data sheet for <u>BPL</u>™ <u>Food Grade H1</u>)

 $\mathsf{BPL}^{\mathsf{TM}}$ Food Grade is a multifunctional antiwear penetrant, that provides the same performance benefits as standard $\mathsf{BPL}^{\mathsf{TM}}$, but it is specially formulated and packaged for use as a food grade lubricant.

Availability F.O.B.: Hartville, Ohio, USA

Size	<u>11 oz</u>	<u>12oz.</u>	1 Gal	<u>5 Gal</u>	<u>Drum</u>	<u>Totes</u>	<u>Bulk</u>
	<u>Aerosol</u>	<u>Spray</u>		<u>Pail</u>			
Item #	87002	87001	87003	87004	87006	87007	87009

BPL™ Plus Tack (Food Grade H1 Lubricant & Corrosion Inhibitor)

The addition of a food grade tackifier provides adhesiveness to the performance of BPL[™] Food Grade. Some applications and environmental conditions may require an additional tacky surface film that protects equipment from corrosion. The tackifier added to BPL[™] Food Grade helps meet this requirement and also holds the lubricant to the surface of moving parts and improves anti-wear.

Availability F.O.B.: Hartville, Ohio, USA

Size	<u>12oz.</u>	1 Gal	<u>5 Gal</u>	<u>Drum</u>	<u>Totes</u>	<u>Bulk</u>
	Spray		<u>Pail</u>			
Item #	80201	80203	80204	80206	80207	80209

BPL™ Tacky White (Food Grade) H1

A specially formulated, biodegradable, biobased penetrant that can be used as a light tacky, solid film lubricant in food processing equipment and is essentially odorless and tasteless. Incorporating the white graphite provides a solid film extreme pressure lubricant that reduces friction and wear on sliding surfaces.

Availability F.O.B.: Hartville, Ohio, USA

Size	12oz. Spray	1 Gal	<u>5 Gal</u> <u>Pail</u>	<u>Drum</u>	<u>Totes</u>	<u>Bulk</u>
Item #	87071	87073	87074	87076	87077	87079

Replace your WD-40, LPS, CRC and other Hazardous penetrants with BPL™