

## Overview

BioBlend PPL is a readily biodegradable lubricant for the plunger packing in positive displacement reciprocating pumps, such as triplex and quintuplex pumps used in oil and gas hydraulic fracturing and cementing operations. It is formulated from renewable biobased resources and contains no mineral oil or toxic additives, thus reducing environmental impact associated with the handling and use of lubricants in these operations. Additionally, the blend of highly refined natural ester base oil and biobased polymer in BioBlend PPL reduces friction compared to conventional mineral oil-based lubricants, which translates to less wear and extended packing life.



BioBlend PPL fluids are formulated featuring our proprietary **eSyn<sup>TM</sup>** technology and are available in ISO grades 68 and 100.

## Typical Properties Typical Properties

PROPERTY	ASTM TEST METHOD	PPL 68	PPL 100
Product Code		BB8200068	BB8200100
ISO Grade	Alex :	68	100
Specific Gravity	D-1298	0.91	0.91
Viscosity @40°C, cSt	D-445	68	100
Viscosity @100°C, cSt	D-445	11.2	18.1
Viscosity Index (VI)	D-2270	>200	>220
Pour Point °F (°C)	D-97	-25 (-32)	-30 (-34)
Flash Point °F (°C)	D-92	>600 (316)	>600 (315)
Timken OK Load, lbs.	D-2509	>60	>60
Falex EP Fail Load	D-3233	3500	3500
Copper Corrosion	D-4048	1A	1A
Readily Biodegradable (meaning>60%)		Pass	Pass
Biodegradability	OECD 301B	>75	>75

## Key Attributes / Approvals





- Helps ensure an effective seal between plunger and packing
- Excellent adhesion and resistant to wash-off
- · Reduces friction and wear
- Readily biodegradable with minimal toxicity characteristics
- Classified as Environmentally Acceptable Lubricants (EAL's) as per the EPA's guidance document that
  defines standards for Environmentally Acceptable Lubricants (EPA 800-R-11-002)
  and as required by EPA's 2013 U.S. Vessel General Permit (VGP).

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

Rev. BBPPL-05292020

