

BIOGREASE PPG

Overview: BioGrease PPG is specifically designed for plunger packing lubrication of triplex and quintuplex pumps. BioGrease PPG is made from a high quality natural ester base oil, with a special blend of polymers to provide low temperature pumpability, excellent adhesion to the plunger, and minimize friction while providing an excellent seal in the system. Pumpability is critical in these pumps and BioGrease PPG offers excellent performance at a very wide range of temperatures. In addition, this ultra-low toxicity grease is made from bio-based, sustainable base stocks, and is readily biodegradable if released in the environment.

Specifications, Approvals, Recommendations:

- Field proven in shale formations throughout the United States: Marcellus, Bakken & Eagleford

Physical Properties	PPG 00	PPG 0	PPG 1
NLGI Grade	00	0	1
Penetration, ASTM D217	410-430	355-385	310-340
Color	Amber	Amber	Amber
Thickener Type	Lithium 12	Lithium 12	Lithium 12
Texture	Smooth	Smooth	Smooth
Viscosity, ASTM D445 @40°C, cSt	100	100	100
Viscosity, ASTM D445 @100°C, cSt	21	21	21
Flash Point, ASTM D92, °F (°C)	520 (271)	510 (266)	510 (266)
Fire Point, ASTM D92, °F (°C)	520 (271)	510 (266)	510 (266)
Copper Corrosion, ASTM D4048	1A	1A	1A
Rust Test, ASTM D1743, A & B	PASS	PASS	PASS
Readily Biodegradable (meaning>60%)	PASS	PASS	PASS
OECD 301B, %	>60	>60	>60
Aquatic Toxicity			
OECD 201 - Algae (EC 50), 72 hr, mg/L	>32,000	>32,000	>32,000
OECD 202 - Daphnia (EC 50), 48 hr, mg/L	>26,000	>26,000	>26,000
OECD 203 - Fish (LC 50), 96 hr, mg/L	>56,000	>56,000	>56,000

Key Attributes:

- Provides an effective seal between packing and liners, extending the useful life of the equipment
- Excellent adhesion and wear protection allowing for increased uptime
- Operator friendly
- Resists corrosion and wash-off
- Readily biodegradable and ultra low toxicity
- Reduces environmental impact and liability

