



CITGO® Aluminum Complex PL Grease

OVERVIEW



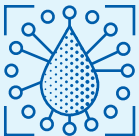
- Developed with unique semi-fluid formulas to provide exceptional flow performance.
- Optimized to provide consistent lubricant flow for optimal protection of frac pump plungers.
- Properly lubricated plungers can operate at peak performance, maximizing uptime.
- Aluminum Complex PL 000 Arctic Grease is formulated for improved flow at very low temperatures.

FEATURES & BENEFITS



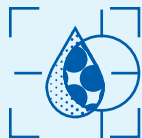
- Superior lubricant barrier to prevent seal failures.
- Protects against friction and heat damage.
- Exceptional extreme pressure (EP) protection.
- Excellent anti-wear protection prolongs plunger life.
- Outstanding resistance to rust and corrosion on copper and brass.
- Performs well over a wide temperature range.
- Arctic version formulated to flow well at very low temperatures.

APPLICATIONS



- For use with frac pump plungers where excellent adhesion, pumpability, corrosion resistance, wear, and extreme pressure protection are needed.
- Designed to work with automatic lubricators.
- Consult owner's manual for proper lubricant selection.

PROPERTIES



Typical Properties for CITGO Aluminum Complex PL Grease:

Material Code	655564001	655565001	655566001
NLGI Grade	000 Arctic	000	00
Worked Penetration, ASTM D217	445-475	445-475	400-430
Thickener Type	Aluminum Complex	Aluminum Complex	Aluminum Complex
Color	Red	Red	Red
Texture	Smooth & Adhesive	Smooth & Adhesive	Smooth & Adhesive
Copper Corrosion, ASTM D4048	1a	1b	1b
Rust Prevention, ASTM D1743	Pass	Pass	Pass
Four-Ball Weld, ASTM D2596, kgf	400	400	400
Four-Ball Wear, ASTM D2266, mm	0.52	0.49	0.60
US Steel Mobility @ 0°F, gpm	>100	—	18
Approximate Temperature Range, °F(°C)	-20 to 325 (-29 to 163)	0 to 325 (-18 to 163)	10 to 325 (-12 to 163)
Base Oil Viscosity: 40°C, cSt	150	1000	1000

©2019 CITGO Petroleum Corporation CITGO, as well as the CITGO logo, trade name and trade dress, and all related marks are registered trademarks of CITGO Petroleum Corporation.