

## 197 MOLY PURE SYNTHETIC GREASE

Moly Pure Synthetic Grease is a multi-purpose, extreme pressure, wide temperature range grease specially formulated for use in heavy duty equipment that is being used under the most adverse conditions of excessive pressure, high stock loading, extreme hot or cold temperatures and moisture. Moly Pure Synthetic Grease is compounded from the highest quality polyalphaolefin (PAO) synthetic base oils available. Blended into these polyalphaolefin base oils is a bentone base thickener and selected additives which provides the following outstanding performance features:

- Wide temperature application range of  $-50^{\circ}\text{F}$  to  $+500^{\circ}\text{F}$ .
- Extended bearing life, even at elevated temperatures and speeds.
- Excellent low temperature pumpability characteristics to temperatures as low as  $-50^{\circ}\text{F}$ .
- Exceptional rust and oxidation inhibiting characteristics.
- Excellent resistance to water washout.
- Excellent anti-wear and extreme pressure load carrying properties.
- Excellent mechanical and thermal stability.
- Excellent shear stability.

Further blended into this blend of polyalphaolefin base oils, bentone thickener and selected additives is molybdenum disulfide. The molybdenum disulfide gives Moly Pure Synthetic Grease the ability to act as a “backstop” lubricant when the grease base is either destroyed or wiped away due to unexpected loads, start-up or other conditions which can exceed the capabilities of the grease base’s fluid film lubrication. This “backstop” is created by the molybdenum disulfide’s natural affinity for metal surfaces. Molybdenum disulfide plates to the metal surfaces to form a long lasting solid lubricant film which will withstand pressures up to 500,000 pounds per square inch, giving the metal surfaces of the bearing the protection they need during periods of high speed, high shock loads and extreme pressure.

The Moly’s solid lubricant film also helps to reduce friction which results in reduced wear and reduction in contact area temperature. This results in increased working life of the grease, equipment life, less downtime and extended lubrication cycles.

Moly Pure Synthetic Grease is compatible with all types of seal materials. However, Moly Pure Synthetic Grease is not compatible with soap base greases such as aluminum complex, lithium 12-hydroxystearate, lithium, lithium complex, calcium, calcium complex soap base greases and polyurea base greases.

## TYPICAL PROPERTIES

<b>NLGI Grade</b>	<b>2</b>
Worked Penetration 77°F/25°C (ASTM D217)	265 to 295
Type Thickener	Bentone
Dropping Point °F/°C (ASTM D2265)	None
Rust Inhibition Test (ASTM D1743)	1,1,1
Oxidation Stability Test (ASTM D942)	
PSI Loss at 100 hours	2
Timken EP Test (ASTM D2509)	60
Four Ball EP Test (ASTM D2596)	
Weld point, kg	315
Load Wear Index, kg	45
Four Ball EP Test (ASTM D2266)	
Scar Diameter, mm	.68
Falex Continuous Load (ASTM D3233)	
Failure, lbs.	800
Lincoln Ventmenters	
Psi @ 100°F	200
Psi @ 30°F	575
Psi @ 0°F	700
Psi @ -20°F	850
Psi @ -40°F	1000
Grease Mobility @ 0°F/-18°C US Steel Method	
Flow Rate gram. sec	.34
<b>BASE OIL PROPERTIES:</b>	
Viscosity 40°C cSt (ASTM D445)	56.5 – 58.5
Viscosity 100°C cSt (ASTM D445)	8.5 – 9.5
Viscosity Index (ASTM D2270)	136
Flash Point °F/°C (ASTM D92)	500°/260°
Fire Point °F/°C (ASTM D92)	540°/282.°
Pour Point °F/°C (ASTM D97)	-40°/-40°