SINCE 1839
Schaeffer's
SPECIALIZED LUBRICANTS

TECHNICAL DATA

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ISO 9001 CERTIFIED

#228PGL SUPER HV PIVOT GEAR LUBE

Super HV Pivot Gear Lube is an extreme pressure, thixotropic semi-fluid grease that is specially formulated for use in the lubrication of gear boxes of center pivot irrigation systems.

Super HV Pivot Gear Lube is compounded from a blend of the finest select high viscosity index solvent refined, severely hydrofinished 100% paraffin base oils available. Blended into these 100% paraffin base oils fluids are an aluminum complex base thickener, carefully selected extreme pressure, anti-wear, lubricity agents, rust and oxidation and corrosion inhibitor additives and unique polymer base additive system. This formulation provides Super HV Pivot Gear Lubricant with the following performance features:

- Excellent flow-ability around bearings and gears even at low temperatures
- Thixotropic properties to thin down when worked by the motion of the gears and bearings and to thicken back to its original consistency after the gearbox is no longer in motion. This allows the Super HV Pivot Gear Lube the ability to provide flow back and heat transfer, while still remaining thicker in consistency in the outer areas of the gearbox in order to provide sealing to keep Super HV Pivot Gear Lube in and moisture and water contamination out.
- Excellent resistance to water washout and water spray off
- Excellent resistance to lubricant breakdown due to moisture contamination
- Excellent shear and mechanical stability
- High base oil viscosity (ISO 460) that provides Elastohydrodynamic (EHL) viscometrics and film forming characteristics for excellent resistance against wear for heavily loaded components.
- Superior anti-wear and extreme pressure protection and performance especially under heavily loaded and high shock loading conditions
- Excellent lubricity to prevent wear
- Excellent reversibility. This property allows Super HV Pivot Gear Lube to retain its' grease like consistency and remain around the bearings and gears during periods of heat, high shock loading, extreme pressure and severe mechanical action
- Excellent rust and oxidation inhibiting characteristics.
- Excellent protection against rust and corrosion
- Excellent resistance to oxidation and thermal degradation
- Excellent adhesive/cohesive properties in order to provide the Super HV Pivot Gear Lube with the ability to seal moisture out along with resisting washout, pound out, splatter or squeeze out during periods of high loads, vibration, shock loading, extreme pressure and severe mechanical action
- The ability to cling to and stay on metal surfaces. This property allows the Super HV Pivot Gear Lube with the ability to be carried to all of the moving mechanisms of the pivot gear drive in order to prevent wear and be adequately lubricated during adverse service conditions.
- Non-corrosiveness to yellow metals such as copper, brass, bronze and their alloys
- Very good sealing properties to prevent leakage of the Super HV Pivot Gear Lube from the pivot gear drive.

Super HV Pivot Gear Lube uses an organic, Synthesized Moly which plates itself to metal surfaces of the bearings like molybdenum disulfide (MoS_2). Once plated, Synthesized Moly forms a long lasting lubricant film that further reduces friction and wear, especially during periods of high shock loads, vibration and extreme pressure. This lubricant film will withstand pressures up to 500,000 pounds per square inch, giving the metal surfaces of the bearings the protection they need during these extreme conditions.

Synthesized Moly also helps to reduce friction which results in reduced wear, reduced contact area temperatures, increased equipment life, less downtime and extended lubrication cycles.

The use of Synthesized Moly enables Super HV Pivot Gear Lube to be suitable for use in the lubrication of rolling element bearings and can be used in those rolling element bearing applications that have restrictions on the use of greases that contain molybdenum disulfide (MoS_2).

TYPICAL PROPERTIES

NLGI Grade	**00**
Worked Penetration 60 Strokes @ 77°F/25°C ASTM D-217	400-430
Type Thickener	Aluminum Complex
Dropping Point °F/°C ASTM D-2265	500°/260°
Oxidation Stability ASTM D-942	
PSI Loss @ 100 hours	1.5
Timken EP Test ASTM D-2509	
Failure Load, lbs-f	75
Four Ball EP Test ASTM D-2596	
Weld Point. Kgs	400
Four Ball Wear Test ASTM D-2266	
Scar diameter, mm	0.4
Water Washout Test ASTM D-2164	
% Weight Loss 175°F/79°C	2.5%
Copper Strip Corrosion Test ASTM D-4048	1a
Rust Inhibition Test ASTM D-1743	
Rating	1,1,1
Emcor Rust Test ASTM D-6138	
Distilled Water	Pass
Synthetic Sea Water	Pass
Base Oil Properties	
Viscosity cSt @ 40°C ASTM D-445	470-555
Viscosity Index ASTM D-2270	102
Flash Point °F/°C ASTM D-92	471º/244º