



Gear Oil GP

Phillips 66® Gear Oil GP is a high-quality, highly compounded, non-EP gear lubricant developed for the lubrication of heavily loaded worm gear drives operating at low to medium speeds and moderate to high temperatures. It is particularly recommended for use in worm gear swing drives on bucket trucks and other mobile equipment.

Gear Oil GP is formulated with high viscosity base oils compounded with fatty oil and special anti-wear additives. It provides high film strength and high load-carrying capacity as well as excellent oiliness characteristics for reduced friction and effective lubrication of bronze-on-steel and other non-ferrous alloy worm gear drives. This results in reduced gearbox operating temperature and improved gearbox efficiency. It will emulsify with water to maintain excellent lubricity for protection of worm gear drives operating in wet environments.

Applications

- Worm gear drives for winches, telescoping booms, digger derricks and electric utility bucket trucks
- Industrial worm gear drives made with non-ferrous alloys (bronze-on-steel, bronze/aluminum alloy-on-steel)
- Heavily loaded, low-speed bearings subject to moisture contamination
- Differentials on classic and antique vehicles that require an API GL-2 quality gear oil

Features/Benefits

- Excellent lubricity for protection of sliding surfaces against scuffing
- High load-carrying capacity
- High film strength
- Emulsifies with water to resist washing
- Good oxidation resistance and thermal stability
- Protects against rust and corrosion
- Non-corrosive to bronze or brass

**Highly
Compounded,
Non-EP Worm
Gear Lubricant**

**KEEPING THE
WORLD
RUNNING
SMOOTHLY.**





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Typical Properties	
ISO Grade	460
AGMA Grade	7 Comp
Specific Gravity @ 60°F	0.901
Density, lbs/gal @ 60°F	7.50
Color, ASTM D1500	4.5
Flash Point (COC), °C (°F)	152 (305)
Pour Point, °C (°F)	-27 (-17)
Viscosity	
cSt @ 40°C	460
cSt @ 100°C	30.5
SUS @ 100°F	2,466
SUS @ 210°F	150
Viscosity Index	95
Acid Number, ASTM D974, mg KOH/g	1.12
Copper Corrosion, ASTM D130	1a
Foam Test, ASTM D892, Seq. I, mL	10/0
Four-Ball EP, ASTM D2783, Weld Load, kgf	400
Four-Ball Wear, ASTM D4172, Scar Diameter, mm	0.61
Rust Test, ASTM D665 A&B	Pass
Timken OK Load, ASTM D2782, lb	65

Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/EN/products/Pages/MSDS.aspx>.