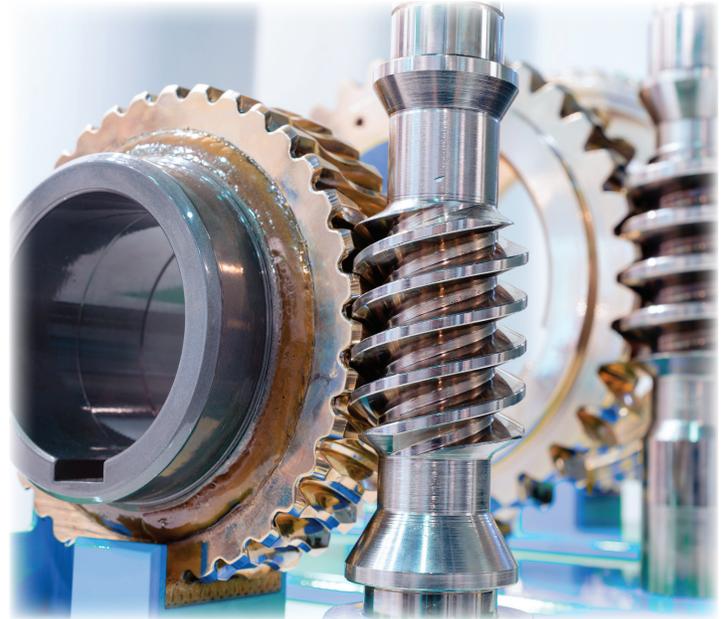




Almasol Worm Gear Lubricant (460-680)

Premium Gear Oil Formulation Ensures Dependable, Long-Lasting Protection in Wide Temperature Range

Almasol® Worm Gear Lubricant (460 & 680) provides long-lasting protection over a wide temperature range in a variety of applications – including enclosed worm gearboxes, steam cylinders and brine pumps. Its high-performance formulation includes high-quality base oils; thermally stable lubricity additives; oxidation, corrosion and wear-reducing additives, including Almasol, LE's proprietary solid wear-reducing additive; and cleanliness additives. The lubricity additives reduce friction and protect bronze gears from excessive wear in enclosed worm gearboxes where extreme pressure (EP) gear lubricants cannot be used. Oxidation and corrosion additives ensure superior performance in high-temperature applications where harmful deposits can occur. This premium lubricant also features excellent demulsibility to enable easy water drain-off.



Beneficial Qualities

Dependable Wear Protection

- Reduces friction and wear in heavily loaded worm gears
- Prevents metal-to-metal contact

Oxidation & Corrosion Resistance

- Offers wide temperature range protection
- Resists oxidation and corrosion
- Reduces residue formation
- Keeps gearbox free of deposits

Long-Lasting Reliable Service

- Resists oxidation for longer oil life
- Separates readily from water
- Extends drain intervals and requires less make-up oil between drains

Available Grades

- ISO 460
- ISO 680

Proprietary Additive

LE's proprietary additives are used exclusively in LE lubricants. Almasol Worm Gear Lubricant contains Almasol.

Almasol® solid wear-reducing additive is able to withstand extremely heavy loads, chemical attack and temperatures up to 1,900°F (1,038°C). It is attracted to metal surfaces, forming a microscopic layer but not building on itself or affecting clearances. Almasol minimizes metal-to-metal contact and the resulting friction, heat and wear.



Almasol® Worm Gear Lubricant

	<u>460</u>	<u>680</u>
Color	Purple	Purple
ISO VG	460	680
AGMA Grade	7C	8C
Relative Density @ 60°F/60°F, ASTM D1298	0.892	0.897
Viscosity @ 100°C, cSt, ASTM D445	33.0	44.5
Viscosity @ 40°C, cSt, ASTM D445	460	680
Viscosity Index ASTM D2270	105	110
Flash Point °C (°F), (COC), ASTM D92	285 (545)	285 (545)
Pour Point °C (°F), ASTM D97	-15 (-5)	-15 (-5)
Rust Test 4 hrs @ 60°C, DI H2O, ASTM D665A	Pass	Pass
Rust Test 4 hrs @ 60°C, Sea H2O, ASTM D665B	Pass	Pass
Copper Corrosion 3 hrs @ 100°C, ASTM D130	1a	1a
Four-Ball Wear @ 75°C, 1200 rpm, 40 kgf, 60 minutes, mm wear, ASTM D4172	0.50	0.50

Performance Requirements Met or Exceeded

- AGMA 9005-F16 CP
- USDA H2

Typical Applications

- Enclosed worm gearboxes
- Steam cylinders
- Brine pumps

