

Moly Gear Lube

... Especially Formulated to Provide Maximum Protection for Enclosed Gear Boxes in Extreme Service Operations.

SWEPCO 203 Moly Gear Lube combines the proven performance of SWEPCO's premium quality 201 Multi-Purpose Gear Lube with the advanced lubrication characteristics of molybdenum disulfide (moly). This unique combination provides the ultimate in protection for high temperature, heavy load, extreme service operation of most industrial gear boxes, manual transmissions, final drives and power take off units. SWEPCO 203 Moly Gear Lube features the very finest quality base stocks, suspension grade moly and an exhaustively tested additive package which includes Lubium®, SWEPCO's highly effective extreme pressure/anti-oxidant additive.

Prevents Metal-to-Metal Contact. SWEPCO 203 Moly Gear Lube provides an **extra margin of safety** for equipment operated under extreme service conditions. The additive which supplies this feature is **molybdenum disulfide** (moly), a unique friction



A chemically advanced formulation which includes a superior grade of technical fine molybdenum disulfide gives SWEPCO 203 the performance edge it needs to protect gear boxes in the most challenging applications.

modifier which plates wear surfaces to prevent damaging metal-to-metal contact even if the base lubricant is squeezed out.

Gears and bearing surfaces are effectively protected from scoring, scuffing, spalling, welding, pitting and other forms of damage even under the most severe "boundary" lubrication conditions. Laboratory tests have proven that even under pressures of up to **500,000 pounds per square inch**, moly helps protect gears and bearings from damage.



Manufacturing applications



High shock applications



Extreme pressure applications

PERFORMANCE

Reduces Heat and Friction. Moly is also responsible for significant heat reduction and, in many cases, fuel savings when compared to conventional gear lubricants.

Up To 250,000 Miles' Service. SWEPCO 203's advanced formulation provides **safe, reliable, long term protection from wear, friction, oxidation, sludge, varnish and corrosion.** Service can **exceed 250,000 miles** in over the road trucking operations.

Reduces Gear Oil Consumption. For users who maximize its life through SWEPCO's Laboratory Oil Analysis Program can reduce gear oil consumption by **as much as 50 to 75%.**

Measurable Heat Reduction. Laboratory tests designed to measure the performance of gear lubes in high temperature applications have proven SWEPCO 203's formulation can **reduce operating temperatures** by as much as 8 to 18% (29 to 72°F) when compared to the performance of commercially available reference oils.

Outstanding Extreme Pressure Performance. SWEPCO 203 exceeds a **60 Lb. Timken OK Load** and demonstrates superior performance in Timken Abrasion and High Speed Tests, Shell 4-Ball EP and Wear Tests and Falex EP and Wear Tests.

Improved High Temperature Stability and Oxidation Control. SWEPCO 203 has also demonstrated superior thermal stability and control of oxidation and deposit formation. Numerous tests have proven a **reduced tendency to form harmful deposits**, revealing deposit ratings as much as eight times cleaner than other commercially available gear oils. And, in the segment of the MIL-L-2105D/C tests designed to measure viscosity increases in high temperature operation, SWEPCO 203's formulation demonstrated only a 20% increase in viscosity, five times less than the allowable 100% increase required to meet the specification.

Improved Low Temperature Performance. SWEPCO 203 lubricates gears quickly to help eliminate wear from dry starts in such critical areas as final drive bearing channels on cold mornings or when equipment has been inactive for some time. Maximum low temperature fluidity also improves cold weather shifting and **prevents channeling and lubricant starvation.**

Other Features Assure Optimum Performance. The remainder of the additive package used in SWEPCO 203 has been carefully selected to assure optimum performance and well balanced protection. Resistance to rust, corrosion, water emulsification and foaming are all superior. In addition, SWEPCO 203 meets the special lubrication requirements of limited slip differentials, preventing squawk, chatter and other noise associated with these final drive units.

Exceeds Most Manufacturers' Requirements. SWEPCO 203 exceeds the requirements of most industrial gear box, final drive and power take off unit manufacturers and major heavy-duty manual transmission manufacturers.

Exceeds Severe Service Specifications. SWEPCO 203 meets or exceeds the requirements of all AGMA specifications, API GL-5, API MT-1, MIL-L-2105E, USS 223, Mack Trucks Inc. GO-J, Rockwell-Standard 0-76, Cincinnati Milacron, Clark MS-8, White Motors MS 0016, John Deere J11D, Ford M2C105A, M2C108C, M2C 154A, International Harvester, European & Japanese Gear Manufacturer's and USDA requirements for use in closed lube systems in food and beverage plants.

Typical Physical Properties

SAE Grade	80W90	90	--
ISO Grade	150	220	320
Density, Lbs./Gal. @ 60°F	7.42	7.45	7.48
Flash Point COC, °F	400	405	415
Pour Point COC, °F	-10	-5	15
Viscosity, 40°C, cSt	151	220	313
Viscosity, 100°C, cSt	15.3	19.1	23.6
Viscosity, 210°F, SUS	79	95	116
SAE Grade	140	--	250
ISO Grade	460	680	1000
Density, Lbs./Gal. @60°F	7.55	7.70	7.72
Flash Point COC, °F	560	560	560
Pour Point COC, °F	20	20	20
Viscosity, 40°C, cSt	442	675	1025
Viscosity, 100°C, cSt	29.2	36.4	50.7
Viscosity, 210°F, SUS	143	176	241



A Product of SPX Technology™.

... the cutting edge performance SWEPCO
Customers have come to expect since 1933



Southwestern Petroleum Corporation