



Moly Grease

... A Premium Quality, Non-Melt, Multi-Purpose Grease Made With Technical Fine Grade Powdered Moly for Unexcelled Control of Wear, Friction & Heat

SWEPCO 101 Moly Grease represents the "state of the art" in grease technology, combining superior base stocks and gelling agent with the proven performance of powdered moly and other highly effective additives.

Its advanced chemistry outperforms competitive "top of the line" greases in a number of important areas, including friction reduction, heat and wear control, high heat and oxidation resistance, cold temperature performance, service life and lubrication cost control.

For companies, equipment or service conditions that demand the best, there can be only one answer . . . SWEPCO 101 Moly Grease.

Cuts Lubrication Costs

Real world testing has proven use of SWEPCO 101 can significantly reduce parts replacements, grease consumption and maintenance labor:

■ *Field Test 1: Costs Cut 85%.* In a three-year field test at a brick plant, SWEPCO 101 was compared to a competitive "premium quality" high heat grease. The application involved greasing of kiln car bearings in conditions of extreme heat and load. SWEPCO 101 extended greasing cycles from one per week to one every five weeks and cut overall annual lubrication costs more than 85% from \$115,360 to \$14,021.

■ *Field Test 2: Grease Consumption Cut 50-75%.* In another field test on undercutters used for railroad maintenance, SWEPCO 101 was compared to three "premium grade" greases. Compared to the best competitive grease, SWEPCO 101 reduced bearing failures more than 63%, reduced grease consumption 50% and reduced overall lubrication and maintenance costs more than 80%. Compared to the worst performing competitive grease, SWEPCO 101 reduced total lubrication costs 95% from \$136,470 to \$6,200 per 100 track miles.

■ *Field Test 3: Bearing Life Increased 300-400%.* In a field test comparing SWEPCO to three "top-brand" greases, a national airline found SWEPCO 101 increased cargo swivel bearing life three to four times and cut maintenance labor cost by 83%.

Reduces Friction & Heat

One of the primary reasons for the superiority of SWEPCO 101 is the addition of powdered molybdenum disulfide or "moly". Powdered moly is not a conventional extreme pressure additive which works only at elevated temperatures created by severe service conditions. Powdered moly is a truly unique anti-friction compound that works all the time to reduce friction, heat and wear.

Moly works by plating metal surfaces with a microscopically thin anti-friction film which has a high affinity for metal but also has one of the lowest coefficients of friction known.

This highly effective moly film provides an extremely durable second layer of lubrication which reduces friction and drag well below levels encountered with conventional greases. The result is a significant reduction in heat and heat related failures. Equipment runs cooler with increased load carrying capability, operating efficiency and component life in conditions which destroy ordinary greases.

Reduces Wear

Superior wear control results from a highly effective combination of high quality base stocks, a proprietary EP additive, a superior gelling agent and powdered moly. Premium base stocks provide a high viscosity index with a naturally high film strength and superior lubricity. *LUBIUM®* is SWEPCO's highly effective extreme pressure additive that provides additional protection from wear in severe service. A non-melt, synthetic gelling agent insures the oil stays where its supposed to, clinging to metal parts without lubricant starvation, bleeding, separation, washing or pounding out. Finally, powdered moly provides protection from wear in boundary lubrication conditions by preventing metal to metal contact even if the base lubricant should get squeezed out. This thin film can withstand pressures up to 500,000 psi without failing as a lubricant.

The result is maximum protection against wear which translates into longer equipment life and less downtime.

Superior High Temperature Performance

SWEPCO 101 provides superior lubrication at temperatures exceeding 500°F. (260°C). This level of performance comes from the combination of high VI, oxidation resistant base stocks, a high performance synthetic non-melt gelling agent and the anti-friction characteristics of moly. SWEPCO 101 won't melt, separate or bleed, even under the highest operating temperatures. And it won't run off when equipment is stopped.

These three features create an multi-purpose grease with superior high temperature performance characteristics, a grease that will provide greater protection and last longer in high temperature applications. And that means lower grease consumption and extended lubrication cycles.

Better Low Temperature Performance

SWEPCO's high VI base stocks don't thicken at low temperatures, nor does the synthetic gelling agent harden. These two important features insure uniform, dependable lubrication in cold weather without channeling or lubricant starvation, even in today's close tolerance anti-friction bearings. Even at temperatures below -30°F. (-34°C), SWEPCO 101 provides the finest lubrication available.

Better Water & Corrosion Resistance

The synthetic gelling agent used has superior adhesion and simply won't wash out. This makes it ideally suited to applications which require high resistance to water, such as chassis, fifth wheel and water pump lubrication. In addition, SWEPCO 101 provides dependable control of rust and corrosion, protecting bearing surfaces from chemical attack at high temperatures or in corrosive environments.

Typical Physical Characteristics

NLGI Consistency	#1	#2
Penetration, @77 °F, ASTM D-217	330	280
Dropping Point, °F, ASTM D-2265	Non-Melt	
Base Oil Viscosity, cst @40°C	134.4	329.6
Base Oil Viscosity, cst @100°C	13.7	25.0
Color	Blue Gray	
Texture	Buttery	

Typical Performance Characteristics

Meets NSF/CFIA requirements for use in closed lube systems in food and beverage plants.	
Timken OK Load	45
4-Ball Wear Test, Scar Diameter, mm, ASTM D-2266 ...	0.60
Rust Test, ASTM D-1743	1
Oxidation Test, ASTM D-942	
PSI Loss @100 Hrs, max	4
PSI Loss @500 Hrs, max	16
Optimum Operating Temperature Range	
°F (°C)	-30 to +500 (-34 to +260)



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



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