

# Multi-Grade Gear Lube

# Formulated with Lubium® II

SWEPCO 210 Multi-Grade Gear Lube is a high performance gear oil formulated to deliver superior, all-weather performance. Whether the application calls for protection of mobile or stationary gearboxes in hot or cold temperatures, superior base stock blends, proprietary Lubium® //antioxidation/anti-corrosion package and other advanced additive chemistry insure extended drain protection from wear, foaming, overheating, deposits, rust and water contamination. If you want to insure maximum performance and gearbox life in all-climate service. choose SWEPCO 210.



### KEY BENEFITS

- All-weather protection for manual transmissions, gearboxes, gear reducers, gear driven final drives, power take offs and differentials
- Insures full film lubrication without channeling in cold weather start up conditions
- Superior base stock blends & *Lubium*® *II* insure proper viscosity over a wide temperature range
- Controls foaming; lowers operating temperatures
- Extends oil life as much as two to three times or more
- Helps improve fuel economy in over-the-road equipment
- Superior control of deposits, varnish, corrosion, sludge, rust
- Rapid, complete water separation for easy removal
- Exceeds performance requirements of all major gearbox specifications and most OEMs
- Meets and exceeds API GL-5 and MT-1

# Superior All-Weather Protection for Mobile & Stationary Gearboxes



STATIONARY



**COLD WEATHER** 



TRANSIT



and maximum gearbox life with SWEPCO 210.

Enjoy better performance, longer drains

MUNICIPAL

Feature	Benefit	
Superior Base Stock Blends	<ul> <li>Gives you a more uniform viscosity over a wide temperature range</li> <li>Helps improve high temperature oxidation and thermal stability</li> <li>Better low temperature flow characteristics help reduce start-up wear</li> <li>Extends service life</li> </ul>	
LUBIUM® II	Enhances oxidation and corrosion resistance	
Multi-Grade Formulation	<ul> <li>Insures full film lubrication without channeling on start-up in cold temperatures</li> <li>Lower fuel/energy consumption during equipment warm up</li> <li>Full SAE 140 viscosity at operating temperature</li> </ul>	
Oxidation Inhibitor	<ul><li>Reduces oil thickening</li><li>Helps prevent sludge, varnish and carbon deposits that result from oxidation</li></ul>	
Rust & Corrosion Inhibitor	<ul> <li>Builds a chemical bond with the surface to keep moisture and acids from penetrating and attacking surfaces</li> </ul>	
Anti-Foam Additive	• Can lower oil temperatures by 25 - 50° F by dispersing foam, releasing trapped heat	
Oiliness Additive	Enables the oil to penetrate the surface for better lubrication	
Anti-Wear Additive	Helps prevent metal to metal contact, friction and wear	
Extreme Pressure Additive	<ul> <li>Increases film strength of the oil giving it the ability to withstand extreme pressures without harming yellow metals</li> </ul>	
Demulsifier Additive	Promotes rapid water separation and easy water drain off after shut down	
Pour Point Depressant Additive	<ul> <li>Gives the oil better low temperature flow characteristics</li> <li>Helps to reduce low temperature start-up wear</li> </ul>	
Viscosity Index Improver Additive	Less high temperature thinning and low temperature thickening	
Limited Slip Differential Additive	Insures proper frictional characteristics to eliminate chatter, shudder	
Saves Energy	<ul> <li>Increased "oiliness" provides friction reducing film on vital metal parts to reduce power usage by as much as 30%</li> </ul>	
Long Life	Drain cycles 2-3 times longer than conventional oils reduce waste oil disposal	
Lab Tec <sup>™</sup> Fluid Analysis Program	<ul> <li>Maximizes equipment and lubricant life and pinpoints impending problems</li> <li>Reduces waste</li> </ul>	

# **Typical Physical Characteristics**

SAE Gear Oil Grade	80w140 <b>*</b>
Density @60°F, lbs/gal (kg/l)	7.38 (0.884)
Flash point, COC, °F (°C)	400 (204)
Viscosity, 40°C, cSt	281
Viscosity 100°C, cSt	25.0
Pour Point, °F (°C) Max	18 (-28)
Viscosity Index	113
Color	

<sup>\*</sup> Note: SWEPCO 210 is a multi-grade product that has the viscosity of an 80w in cold weather start up conditions and the viscosity of an SAE 140 once it has reached operating temperatures, It is intended for applications that require an SAE 80w140 or an SAE 140 but could benefit from improved cold weather start up performance. It is not intended to be substituted where OEM recommendations call for single grade 80w or 90 weights.

### **Specifications Exceeded**

• AGMA 6EP through 8EP Specifications • AGMA 9005 Specification • SAE J2360 • MIL-PRF-2105E • USS 224 • Mack Trucks Inc. GO-J • Rockwell-Standard 0-76B • NSF & Health Canada requirements for use in closed systems in federally inspected food and beverage plants • CLP Din 151517 parts I, II, III • Ford WDS M2C200-C • API GL-5 and MT-1

## **Typical Performance Properties**

Demulsibility (ASTM D1401) > 38	8/39/3
Timken OK Load, Ibs (ASTM D2782)	70
Timken, High speed lbs (Ford BJ1-5)	. 12.5
Shell 4-Ball Wear Test (ASTM D4172)	
Avg Friction Coefficient	0.082
Avg Scar Diameter, mm	. 0.28
FZG A/8.3/90°C, min, stage passed (DIN51354)	
Copper Corrosion, 3 hrs @212°F (ASTM D130)	1a
Seven Days Moisture Corrosion (CRC L-33)	Pass
Thermal Oxidation Stability Test	
Pentane Insoluble, % Wgt (FTM 2504)	. 0.08
Benzene Insoluble, % Wgt (FTM 2504)	. 0.05
Foam Test (ASTM D892), Sequence I, II, III	0
Gear Test (ASTM STP 512) No rippling, ridging or	pitting
Four-Ball EP kg	400



#### A Product of SPX Technology™.

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

















Southwestern Petroleum Lubricants, LLC