

# Multi-Purpose Gear Lube

### Formulated with Lubium® II

SWFPCO 201 Multi-Purpose Gear Lube is a high performance single weight gear oil formulated to deliver superior performance in a wide range of mobile and industrial gearbox applications. SWEPCO's premium high VI base stocks, proprietary Lubium® II anti-oxidation/anticorrosion package and other advanced additive chemistry provide costefficient extended drain protection from wear, foaming, overheating, deposits, rust and water contamination. If you want to insure maximum performance and gearbox life in a wide range of applications, choose SWFPCO 201 Multi-Purpose Gear Lube.



#### KEY BENEFITS

- Long-drain protection for manual transmissions, industrial gearboxes, gear reducers, gear driven final drives, power take offs and differentials
- Lubium® II enhances thermal stability & insures proper viscosity at high temperatures
- Adhesive/cohesive additive helps eliminate start-up wear
- Controls foaming; lowers operating temperatures
- Rapid, complete water separation for easy removal
- Extends oil life as much as two to three times or more
- Helps improve fuel economy in over-the-road equipment
- Reduces energy consumption in stationary equipment
- Superior control of deposits, varnish, corrosion, sludge, rust
- Exceeds performance requirements of all major gear box specifications and most OEMs

# Cost-Effective, Long Drain Protection for Mobile & Industrial Gear Boxes



Mining



Energy



Construction



Agriculture

Enjoy better performance, longer drains & maximum gearbox life with SWEPCO 201.

Feature	Benefit				
High VI 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	Dramatically enhances oxidation and corrosion resistance				
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	Builds a chemical bond with the surface to keep moisture and acids from penetrating and attacking surfaces				
Adhesive/Cohesive Additive	<ul> <li>Enables the oil to climb when it's cold to eliminat start up wear</li> <li>Reverts to the splash system when the gear box reaches operating temperatures</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				
Demulsifier Additive	Promotes rapid water separation and easy water drain off after shut down				
Pour Point Depressant Additive	Gives the oil better low temperature flow characteristics     Helps to reduce low temperature start-up wear				
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				
Multi-Purpose Formulation	Reduces inventory and lubrication errors to save you money				
Lab <i>Tec</i> <sup>SM</sup> Fluid Analysis Program	<ul> <li>Maximizes equipment and lubricant life and pinpoints impending problems</li> <li>Reduces waste</li> </ul>				

#### Typical Physical Properties (All viscosity grades not available in all markets)

SAE Gear Oil Grade	80W90	90		140		250
ISO Viscosity Grade	150	220	320	460	680	1000
AGMA	4 EP	5 EP	6 EP	7 EP	8 EP	8a EP
Density @ 60°F lbs/gal (kg/l)	7.39 (0.895)	7.40 (0.899)	7.45 (0.902)	7.50 (0.907)	7.60 (0.917)	7.70 (0.923)
Flash Point COC, °F (°C)	400 (204)	405 (207)	415 (213)	560 (293)	560 (293)	560 (293)
Pour Point, °F (°C)						
Viscosity, 40°C, cSt	160	223	316	470	680	1010
Viscosity, 100°C, cSt	16.38	20.50	26.3	35.0	47.0	74.0
Viscosity Index	107	107	109	111	118	138
Color	Blue	Blue	Blue	Blue	Blue	Blue

#### **Specifications Exceeded**

• All AGMA Specifications • SAE J2360 • MIL-PRF-2105E • USS 224 • Mack Trucks Inc. GO-J • Rockwell-Standard 0-76 • Cincinnati Milacron • Clark MS-8 • White Motors MS00 16 • John Deere J11D • Ford M2C 105A, M2C 108C, M2C 154A • International Harvester • European & Japanese Gear Manufacturer Specifications • NSF & Health Canada requrements for use in closed systems in federally inspected food and beverage plants • CLP Din 151517 parts I, II, III • Ford WDS M2C200-C

#### **Performance Properties**

Copper Corrosion, 3 hrs @212°F (ASTM D130)	14+ 70
Load Carrying, High Speed Shock Loading (ASTM L-42)	0.20
% Gear Tooth Scoring	
Ring Drive	Ω
Ring Coast	9
Ring CoastPinion Drive	0
Pinion Coast	
Thermal Durability@ 325°F. (Stressed ASTM L-37)	
Ridging, Spalling, Varnish	None
Chemical Corrosion, Axle/Trans (BT-10) Wgt Loss, mg.	
Steel	
Aluminum	0.9
Brass	0.9
Four-Ball EP Kg	400

Seal Compatibility - Volume % Change	
Nitrile @ 257°F., 168 Hours	
Polyacrylate @ 257°F., 168 Hours	2.1
Fluroelastomer @ 320°F., 168 Hours	0
Foam Test (ASTM D892)	
Sequence I, II, III	0/0, 0/0/, 0/0
Rust-Preventative Test (ASTM D665)	
Method A & B	Clean
Demulsification (ASTM D2711)	
Water in Oil, %	0.5
Free Water, ML	83.3
Emulsion, ML	0.1
Demulsification (ASTM D1401)	



#### A Product of SPX Technology $^{\text{TM}}$ .

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

















## Southwestern Petroleum Corporation