

# Multi-Purpose Gear Lube

# Formulated with Lubium® II

SWEPCO 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 base stocks, proprietary Lubium® // 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 SWEPCO 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                         | <ul> <li>Builds a chemical bond with the surface to keep moisture and acids<br/>from penetrating and attacking surfaces</li> </ul>  |  |  |  |  |
| 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                     | <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<br/>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>™</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)           | 15 (-26)     | 12 (-24)     | 0 (-18)      | 5 (-15)        | 15 (-10)     | 18 (-8)      |
| 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)  |        |
|---|--------|
| FZG A/8.3/90°C, min, stage passed (DIN51354)<br>Timken OK Load, Lbs. (ASTM D2782) | 14+    |
| Four-Ball Wear, Scar Diameter, MM (ASTM D4172)                                    | 0.28   |
| Load Carrying, High Speed Shock Loading (ASTM L-42)                               |        |
| % Gear Tooth Scoring  |        |
| Ring Drive  | 0      |
| Ring Coast<br>Pinion Drive  | 9      |
| Pinion Drive  | 0      |
| Pinion Coast  | 12     |
| Thermal Durability@ 325°F. (Stressed ASTM L-37)                                   |        |
| Ridging, Spalling, Varnish  | . None |
| Chemical Corrosion, Axle/Trans (BT-10) Wgt Loss, mg.                              |        |
| Steel   | 0.2    |
| Aluminum  | 0.9    |
| Brass   | 0.9    |
| Four-Ball EP Kg   |        |
| <del>-</del>  |        |

| Seal Compatibility - Volume % Change |          |
|--------------------------------------|----------|
| Nitrile @ 257°F., 168 Hours          | 2        |
| 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 |
| 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)         | 40/40/0  |
|                                      |          |



### A Product of SPX Technology™.

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

















Southwestern Petroleum Lubricants, LLC