SINCE 1839 Schaeffer's SPECIALIZED LUBRICANTS

TECHNICAL DATA

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ISO 9001 CERTIFIED

170 EXTREME PERFORMANCE FULL SYNTHETIC SAE 75W-140

Extreme Performance Full Synthetic SAE 75W-140 is a multi-grade, highly shear stable, thermally stable and durable extreme pressure synthetic gear lubricant that is specially formulated for use in Harley Davidson V-Twin transmissions and high performance differentials. Extreme Performance Full Synthetic SAE 75W-140 is also recommended for use in heavy-duty or high performance transmissions, aftermarket 5-speed and 6-speed separate motorcycle transmissions and final drives, including standard and limited-slip differentials and shaft drive transmissions requiring the use of a hypoid type gear oil. Extreme Performance Full Synthetic SAE 75W-140 is also recommended for use in differential applications that are found in today's pick-up trucks, SUVs, heavy equipment that are operated in severe applications such as towing, hauling, steep-hill driving, commercial use, plowing, racing, off-road use, rapid acceleration, frequent stop-and-go and high ambient temperatures. **Extreme Performance Full Synthetic SAE 75W-140 is not recommended for use in Harley Davidson Sportsters transmissions and in combined engine/transmission sumps.**

Extreme Performance Full Synthetic SAE 75W-140 is blended from the highest quality polyalphaolefin synthetic (PAO) base fluids available. Blended into these PAO base fluids is a non-corrosive, multifunctional, extreme pressure additive package which provides the Extreme Performance Full Synthetic SAE 75W-140 with the following performance features and benefits

- Exceptional extreme pressure properties to protect parts from excessive wear
- Prevention of premature bearing fatigue and gear scoring, spalling and pitting
- Improved and smoother transmission shifting
- Maximum horsepower
- Superior lubricity to minimize sliding friction for maximum power
- Enhanced thermal and oxidative stability and durability to handle high operating temperatures
- Prevention of thermal oil degradation and breakdown
- Prevention of the formation of sludge and carbon deposits that erode the seals
- Excellent seal compatibility.
- Enhanced protection of copper, brass and bronze components from corrosion
- Minimization of transmission drag
- Excellent protection of components from rust and corrosion in dry conditions and in the presence of moisture.
- Excellent resistance to water and moisture
- Excellent demulsibility characteristics.
- Enhanced gear, bearing and seal cleanliness
- Excellent resistance to foaming
- Reduced operating temperatures
- Longer oil, seal and equipment life

Most types of gearing are designed to operate under hydrodynamic lubrication conditions. That is a full fluid oil film must separate the metal surfaces of the gears and bearings during operation. However, during periods of cold start up, extremely high operating temperatures or high shock loading conditions this full fluid film can be destroyed. Unless a boundary lubricant is present in the gear lubricant when this full fluid film is destroyed, excessive wear can take place.

To prevent this wear Micron Moly®, a liquid soluble type of moly, is further blended into Extreme Performance Full Synthetic SAE 75W-140. This soluble moly provides the boundary lubrication needed by plating itself to the metal surfaces of the gears and bearings. This plating action forms a long lasting

solid lubricant film on the metal surfaces of the gears. This moly film will withstand pressures up to 500,000 pounds per square inch, thus reducing wear and extending equipment life.

Extreme Performance Full Synthetic SAE 75W-140 because of the use of PAO base fluids and the addition of Micron Moly®, not only minimizes cold welding but also allows for an increase in transmission and gear efficiency. This in turn results in lessened starting loads, a decrease in peak power demand, increased fuel economy, a reduction in transmission and gear noise and operating temperatures.

Extreme Performance Full Synthetic SAE 75W-140 contains the proper additive system that allows the product to properly function and lubricate limited slip, positraction and high offset hypoid gear rear ends and differentials.

Extreme Performance Full Synthetic SAE 75W-140 meets and exceeds API Service Classifications GL-5; MT-1; PG-2; Military Specification MIL-PRF-2105E; SAE J2360; Mack GO-J-S, Clark MS-8 Rev. 1; Ford M2C-119A, MC2108C, M2C158A, M2C192A; General Motors Specifications 9985476, 9985044; Chrysler; Rockwell Standard 0-76L; David Brown ET-19; Terex EMS 19003; VME America's EEMS S19003F, EEMS19107, Eaton's Axle Lubricant Specifications, Dana SHAES 234 (Formally Eaton PS-037); ZF TE-ML-05B, ZF TE-ML-05D, and ZF TE-ML-12D.

TYPICAL PROPERTIES

SAE Grade	**75W-140**
Specific Gravity 60°C	
Viscosity, cSt @ 40°C ASTM D-445	193-220
Viscosity, cSt @ 100°C ASTM D-445	25.00-30.50
Viscosity Index ASTM D-2270	176
Brookfield Viscosity @ -40°F/-40°C ASTM D-2983	140,000
Flash Point °F/°C ASTM D-92*	489°/254°
Pour Point °F/°C ASTM D-97	-50°/-46°
Rust Test ASTM D-665	
Procedure A (Distilled Water)	Pass
Procedure B (Salt Water)	Pass
Copper Strip Corrosion Test ASTM D-130	1a
Four Ball E.P. ASTM D-2783	
Weld Point, kg-f	400
Load Wear Index	60
Four Ball Wear Test ASTM D-4172 (1hr/40kg/130°F)	
Scar Diameter, mm	0.35
FZG ASTM D-5182, A8.3/90	
Failure Stage	13th
Falex E. P. Continuous Load Procedure A	2,500
Failure Load, lbs-f	
Demulsibility ASTM D-2711	
Free Water, ml	85
% Water in Oil	0.5
Emulsion	0
L-60-1 Thermal Oxidation Test ASTM D-5704	
% Viscosity Increase	20
Foam Test ASTM D-892	
Sequence I	0/0
Sequence II	0/0
Sequence III	0/0