

# **TECHNICAL DATA**

2600 S. Broadway, St. Louis MO 63118 Ph: 800-325-9962 / Fax: 314-865-4107 www.schaefferoil.com



### 268 SUPREME CMT GEAR LUBE

Supreme CMT Gear Lube is a multipurpose, thermally stable, thermally durable, parasynthetic gear lubricant recommended for use in all types of automotive gear drives where extreme pressure characteristics are needed.

Supreme CMT Gear Lube is blended from the finest, high quality, severely hydro-treated polyalphaolefin (PAO) synthetic base fluids and severely solvent refined, severely hydro-finished, high viscosity index, 100% pure paraffin base oils available and a highly specialized, non-corrosive, thermally stable, thermally durable, multifunctional, extreme pressure additive package that provides the following performance advantages:

#### PERFORMANCE

- Enhanced thermal and oxidative stability and durability to handle operating temperatures of 300°F to + 350°F.
- Excellent seal compatibility and increased seal life.
- Excellent resistance to water and moisture and water separatibility characteristics.
- Excellent resistance to foaming.
- Lower operating temperatures.
- Less energy consumption.
- Longer lubricant and equipment life
- Reduced equipment downtime and maintenance costs.

#### **DEPOSIT PROTECTION**

- Prevention of the formation of sludge and carbon deposits that erode seals.
- Enhanced gear, bearing and seal cleanliness.
- A vast reduction in the formation of deposits.

#### WEAR PROTECTION

- Excellent extreme pressure properties to protect the gears and bearings from excessive wear and fatigue.
- Enhanced protection of copper, brass and bronze components from corrosion.
- Non-corrosivity to brass, bronze and other non-ferrous metal parts.
- Excellent protection of components from rust and corrosion.
- Excellent protection to the gears and bearings even under the most extreme thermally stressed operating conditions.

Molybdenum disulfide is added to Supreme CMT Gear Lube to provide boundary lubrication; the molybdenum disulfide plates itself to the metal surfaces of the gears and bearings. Once plated, molybdenum disulfide forms an indestructible, long-lasting, solid lubricant film capable of withstanding pressures up to 500,000 psi. This solid lubricant film, once plated to the gears and bearings, will reduce friction, vibration, and wear, thus extending equipment life.

The moly film also provides a smooth finish surface on all of the moving surfaces of the gear drives. This smooth finish minimizes the action of cold welding and vibration, which can occur during start up after the gears have been standing idle and during periods of high shock loading. This in turn lessens starting loads and peak power demand, thus resulting in a realistic power cost savings.

Supreme CMT Gear Lube contains an adhesive-cohesive additive that allows the product to tenaciously stick and cling to the gears and bearings. This ensures Supreme CMT Gear Lube retains a fine film that "stays put" on the metal surface of the gears and bearings regardless of how thoroughly it is wiped away.

## Supreme Gear contains the proper additive system to function and lubricate limited slip, positraction, and high offset hypoid gear rear ends and differentials.

Supreme CMT Gear Lube meets and exceeds the following specifications and manufacturer's requirements: API Service classifications GL-5, MT-1 and PG-2, United States Military Specifications MIL-PRF-2105E, SAE J2360, Mack GO-J, Clark MS-8 Rev 1, Ford, General Motors, Daimler-Chrysler, John Deere J11D, Komatsu-Dresser B22-003, Rockwell Standard O-76A and O-76B, Eaton's Final Drive Lubricant Specifications, Terex EEMS19003, VME American's Specifications EEMS19003F, EMS1901, White Motors MS0016, Volvo, Volkswagen.

#### **TYPICAL PROPERTIES**

SAE Grade Specific Gravity @ 60°F Viscosity SUS @ 100°F/38°C (ASTM D445) Viscosity cSt @ 40°C (ASTM D445) Viscosity cSt @ 100°C (ASTM D445) Viscosity Index (ASTM D2270) Flash Point °F/°C (ASTM D92) Fire Point °F/°C (ASTM D92) Pour Point °F/°C (ASTM D97) Rust Test (ASTM D665)	<b>140</b> 0.8908 1578-2551 290-325 25.00-32.00 125 490°/254° 540°/282° -25°/-32° to -33°/-36°
Procedure A (Distilled Water)/ Procedure B (Salt Water) Copper Strip Corrosion Test (ASTM D130) Four Ball EP Test (ASTM D2783)	Pass/Pass 1a 400
Weld Point, kgs. Load Wear Index	400 67.91
Four Ball Wear Test (ASTM D4172) Scar Diameter, mm Coefficient of Friction Timken EP Test (ASTM D2782)	0.28 0.1
OK Load, Ibs. Failure Load, Ibs. Falex EP Continuous Load (ASTM D3233) Procedure A, Failure Load, Ibs	70 75 2500
FZG A/8.3/90 (ASTM D5182), Failure Load	13 <sup>th</sup> Stage
Oxidation Test (ASTM D2893)	
312 hours @ 203°F/95°C	3
% Viscosity Increase L-60-1 Thermal Oxidation Test (ASTM D5704)	3
% Viscosity Increase	22
Demulsibility Test (ASTM D2711)	
Free Water, ml	83
% Water in Oil	0.65
Emulsion, ml.	Trace
Foam Tendency Test (ASTM D892)	
Sequence I	0/0
Sequence II	0/0
Sequence III	0/0