

## 293 SUPREME GEAR LUBE SAE 80W-90

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

Supreme 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

- Excellent low temperature properties which results in the bearings and gears being instantly lubricated at sub-zero temperatures the moment they start turning.
- 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 separability 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.

Micron Moly®, a proven friction reducer, is added to Supreme Gear Lube to provide boundary lubrication. Micron Moly®, a liquid soluble type moly, plates itself to the metal surfaces of the gears and bearings. Once plated, Micron Moly® 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.

Micron Moly® also provides a smooth finished surface on all moving parts 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 fuel economy cost savings.

Supreme Gear Lube contains an adhesive-cohesive additive, which allows the product to tenaciously stick and cling to the gears and bearings. This ensures that Supreme 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 Lube contains the proper additive system to function and lubricate limited slip, positraction, and high offset hypoid gear rear ends and differentials.***

Supreme Gear Lube meets and exceeds the following specifications:

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 M2C105A, M2C108C, M2C154-A, M2C158-A; General Motors Specifications: 9985290, 9985476, 9985044; Chrysler Specifications: MS-8987, MS-9020; John Deere J11D; Komatsu/Dresser B22-0003, B22-0005; Meritor/Rockwell O-76D; Eaton-Roadranger; Terex EEMS19003; VME Americas Specifications: EEMS19003F, EEMS19107; White Motors MS0016; Volvo; Volkswagen.

## TYPICAL PROPERTIES

### SAE Grade

Specific Gravity 60°F

Viscosity 40°C cSt (ASTM D445)

Viscosity 100°C cSt (ASTM D445)

Viscosity Index (ASTM D2270)

Brookfield Viscosity @ -26°C, cP (ASTM D2983)

Flash Point °F/°C (ASTM D92)\*

Fire Point °F/°C (ASTM D92)\*

Pour Point °F/°C (ASTM D97)

Rust Test (ASTM D665)

Procedure A (Distilled Water) / Procedure B (Salt Water)

Copper Strip Corrosion Test, 3 hrs. (ASTM D130)

Four Ball EP Test (ASTM D2783)

Weld Point, kg.

Load Wear Index, kg.

Four Ball Wear Test (ASTM D4172)

1 hr./40kg/130°F

Scar Diameter, mm

Coefficient of Friction

Timken EP Test (ASTM D2782)

OK Load, lbs.

Fail Load, lbs.

Falex Continuous Load (ASTM D3233)

Procedure A

Failure Load, lbs.

FZG (Four Square Gear Test)(ASTM D5182;A/8.3/90)

Foam Tendency (ASTM D892)

Sequence I 75°F ml

Sequence II 200°F ml

Sequence III 75°F ml

Demulsibility Test (ASTM D2711)

Free Water

% Water in Oil

Emulsion

Oxidation Test (ASTM D2893)

% Viscosity Increase after 312 hours @ 203°F/95°C

L-60-1 Thermal Oxidation Test (ASTM D5704)

% Viscosity Increase

### SAE 80W-90

0.8818

180-251

17.50-23.00

110

135,000

470°/243°

510°/266°

-20°/-29°

Pass/Pass

1a

400

65.2

0.28

0.1

70

75

2500

13<sup>th</sup> Stage

0/0

0/0

0/0

85

.5

Trace

3%

22