

## 294A SUPREME INDUSTRIAL SMNT GEAR LUBE

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

Supreme Industrial SMNT 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 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 Industrial SMNT 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 Industrial SMNT Gear Lube meets and exceeds the following specifications:  
 US Steel 224; David Brown S1.53.101 Type E; AGMA 9005-E02, AGMA 9005-F16; DIN 51517 Part 3 (CLP); and Fives Machine P-34, P-35, and P-59.

## TYPICAL PROPERTIES

<b>ISO Grade</b>	<b>320</b>	<b>460</b>	<b>680</b>
AGMA Grade	6EP	7EP	8EP
Specific Gravity @ 15°C (60°F)	0.8878	0.9058	0.9198
Viscosity SUS @ 38°C (100°F) (ASTM D445)	1530-1698	2300-2634	3313-3749
Viscosity cSt @ 40°C (ASTM D445)	290-325	435-500	616-745
Viscosity @ 100°C (ASTM D445)	25.00-32.00	35.00-42.00	34.50-51.50
Viscosity Index (ASTM D2270)	125	127	110
Flash Point °F/°C (ASTM D92)	490°/254°	500°/260°	510°/266°
Fire Point °F/°C (ASTM D92)	540°/282°	550°/288°	560°/293°
Pour Point °F/°C (ASTM D97)	-15°/-26 to -20°/-29°	-10°/-23° to -15°/-26°	-10°/-23° to -15°/-26°
Rust Test (ASTM D665)			
Procedure A (Distilled Water)	Pass	Pass	Pass
Procedure B (Salt Water)	Pass	Pass	Pass
Copper Strip Corrosion Test (ASTM D130)	1a	1a	1a
Four Ball EP Test (ASTM D2783)			
Weld Point, kgs.	400	400	400
Load Wear Index	67.91	69.50	67.91
Four Ball Wear Test (ASTM D4172)			
Scar Diameter, mm	0.28	0.28	0.28
Timken EP Test (ASTM D2782)			
Ok Load, lbs	70	70	70
Failure Load, lbs	75	75	75
Falex EP Continuous Load (ASTM D3233)			
Procedure A			
Failure Load, lbs	2500	2500	2500
FZG A/8.3/90 (ASTM D5182)			
Failure Load	13 <sup>th</sup>	13 <sup>th</sup>	13 <sup>th</sup>
Oxidation Test (ASTM D2893)			
% Viscosity increase after 312 hours @ 203°F/95°C	3	3	3
L-60-1 Thermal Oxidation Test (ASTM D5704)			
% Viscosity Increase	22	22	22
Demulsibility Test (ASTM D2711)			
Free Water, ml	83	83	83
% Water in oil	0.65	0.65	0.65
Emulsion, ml	Trace	Trace	Trace
Foam Tendency Test (ASTM D892)			
Sequence I	0/0	0/0	0/0
Sequence II	0/0	0/0	0/0
Sequence III	0/0	0/0	0/0