

Product Data Sheet



Premium Lubricant Products, Optimal Lubricant Performance, Professional Staff & Service

HB-1177 STARFILM E.P. GEAR LUBE WITH MOLY 80, 90, 140, 250, 80W/90 & 85W/140

DESCRIPTION:

- A green colored superior multi-purpose gear lubricant.
- Contains extreme pressure additives and full bodied cohesive and adhesive agents.
- Oil soluble organic molybdenum added.
- Maintains maximum protection and increases service life of manual transmissions, differentials, worm gears, power dividers and similar equipment using a gear lubricant as a primary lubricant.

ADVANTAGES:

- Provides maximum lubricity, protection from extreme pressures, shock impact loading and waterproofing.
- Prevents expensive replacements and down time caused by structural failure of teeth, bearings, and other vital parts caused by galling, corrosion, overheating, and shearing on gears, transmissions, and differentials throughout a wide range of temperatures.

COMPOSITION:

Premium quality mid-continent base stocks and wear preventing additives as well as anti-foam agents, silicones, corrosion inhibitors, extreme pressure additives and oil soluble organic molybdenum are used in the blending of this excellent lubricant. The performance levels and qualifications of the additive package alone, allow a comfortable safety margin over the protection required by normal service ~n heavy duty equipment operating under high stress conditions.

PERFORMANCE CHARACTERISTICS:

HB-1177 STARFILM E.P. Gear Lube w/Moly contains an oil soluble molybdenum additive. This additive contains sulphur and phosphorous which together function as an anti-oxidant, anti- wear, and extreme pressure agent with low toxicity. The oil soluble molybdenum will not settle out of solution.

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The addition of the oil soluble organic molybdenum provides many additional operating characteristics. As the molybdenum penetrates and plates out, it: reduces friction up to 38% reduces bearing wear up to 60% reduces operating temperatures

HB-1177 STARFILM E.P. Gear Lube w/Moly meets or exceeds these important specifications:

Mil-L-2105B/C	ASTM E)-665B Rust
Protection API Service Classifications	U.S. Steel 220,224
GL2, GL3, GL4, and GL5	AGMA Specifications CS 3000 A/B
DCEA (French Army)	SQM 2C9002 - AA (Ford Germany)
FIAT (LS Differentials)	Borg/Warner

USES:

Recommended as a service fill of axles, manual transmissions, transfer cases & power dividers, differentials, all heavy duty hypoid and spiral bevel axles, all automotive and industrial worm gears, and particularly on conventional axles using phosphate treated gears.

APPLICATIONS:

The S.A.E. weight selected for any particular type of equipment should correspond with the recommended weight and temperature recommendations in the owner's manual or current check chart of the equipment.

HB-1177 STARFILM E.P. Gear Lube w/Moly is available in four single viscosities S.A.E. 80,90,140,& 250 and is also available in two multi viscosities, S.A.E. 80W/90 & 85W/140

TYPICAL SPECIFICATIONS:

S.A.E, Grade Number	80	90	140	250	80W/90	85W/140
Viscosity SUS@ 210°F	70	100	155	226	80	155
Viscosity Index	115	115	115	106	105	110
Flash Point, C.O.C. °F	515	540	565	585	545	565
Fire Point, C.O.C. °F	570	590	615	635	575	625
Pour Point °F	-20	-15	-5	+10	-15	-15
Gravity °F	28	26	26	25	29.5	26
ASTM D 982 58T Foam Test	No foam					
Sulphur % by weight	1.8	t.8	1.9	1.9	1.9	1.9
Phosphorus % by weight	0.17	0.17	0.17	0.17	0.17	.017
Thermal Stability	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Timken Load Test, LBS.	70	70	70	70	70	70

Typical Characteristics are those obtained with normal tolerance of production and no constitute a specification.

Variations that do not affect the performance of the product during the normal manufacturing process.

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