



FULL SYNTHETIC GEAR LUBRICANTS

STARFIRE FULL SYNTHETIC GL-5 GEAR LUBRICANTS are multipurpose lubricants designed for service in automotive and heavy duty applications. STARFIRE Full Synthetic GL-5 Gear Lubricants are formulated with synthetic base stocks and a sulfur-phosphorus extreme-pressure additive package with friction modifier, which provides excellent thermal and oxidative stability, as well as anti-foam, anti-rust and anti-corrosion protection and excellent load-carrying capabilities.

APPLICATIONS

STARFIRE Full Synthetic 75W-90, 75W-140 Gear Lubricants are suitable for use in the following applications:

- API GL-5
- Mack GO-J, GO-H
- API MT-1
- PG-2 limited slip differentials
- MIL-PRF-2105E & MIL PRF 2105D

STARFIRE Full Synthetic 50W Transmission Oil is suitable for use in the following applications:

- API MT-1
- Mack TO-A Plus
- Eaton PS-386, PS-164 Rev 7
- ZF Freedomline
- Navistar/International TMS 6816
- MERITOR® O-81 (Publication TP-90014)

BENEFITS

- Provides excellent protection against wear under extreme pressure and high torque operation
- High resistance to thermal breakdown, foaming, rust, and corrosion
- Smooths and quiets operation



CONVENTIONAL GEAR LUBRICANTS

STARFIRE GL-5 GEAR LUBRICANTS are multi-purpose lubricants designed for service in automotive and heavy duty applications. They are formulated with refined paraffinic base stocks and a sulfur-phosphorus extreme-pressure additive package, which provides excellent thermal and oxidative stability, as well as anti-foam, anti-rust and anti-corrosion.

STARFIRE GL-1 GEAR LUBRICANT is manufactured with high-quality base stocks to provide outstanding oxidation stability for long service life. GL-1 gear lubricants are gear oils inhibited against foaming and do not contribute to corrosion or wear of yellow metals, such as brass or bronze.



APPLICATIONS

- **STARFIRE GL-5 Gear Lubricant** meets the API GL-5 Service Designation as well as the MIL-L-2105F & MIL Prf 2105E & is suitable for use in limited-slip differentials.
- **STARFIRE GL-5 Gear Lubricant** is also suitable for use in Mack GO-H & GO-J and Proposed PG-1/PG-2 Service Designations, Scania ST0 110, MERITOR -076D (80W90), and MERITOR -076A (85W140), MAN 342 M2 (160,000 km) & MB 235.80.
- **STARFIRE GL-5 Gear Lubricant** meets API MT1
- **STARFIRE GL-1 Gear Lubricant** is designed for use in manual transmissions and transfer cases in on-highway & off-highway equipment.
- **STARFIRE GL-1 90 Gear Lubricant** is also suitable for use in industrial gear-oil applications that call for a straight mineral oil in the SAE 50 engine oil viscosity weight range.

BENEFITS

Long service life - Non-foaming - Non-corrosive



FULL SYNTHETIC GEAR LUBRICANTS

TYPICAL TEST DATA	75W-90	75W-140	80W-140	50W
Viscosity: cSt @ 40°C cSt @ 100°C	103.80 15.71	194.75 27.33	197.60 27.83	134.70 19.24
Viscosity Index	164	178	179	165
Pour Point, 60°F	-37	-38	-38	-33
Flash Point, (COC), °F	435	450	456	448
API Gravity @ 60°F	34.1	33.9	33.9	34.2
Specific Gravity, 60°F	0.855	0.856	0.856	0.854



CONVENTIONAL GEAR LUBRICANTS

TYPICAL TEST DATA	80W-90	85W-140
Viscosity: cSt @ 40°C cSt @ 100°C	130.9 13.98	347.7 26.39
Viscosity Index	104	100
Flash Point, COC, °C (°F)	224 (435)	235 (455)
Specific Gravity @ 60°F (15.6°C)	0.8885	0.9002
Gravity, API, 60°F	27.76	25.69

TYPICAL PROPERTIES	Test Method	SAE 90	SAE 140
Gravity, °API	ASTM D287	28.99	26.69
Specific Gravity @ 60°F (15.6°C)	ASTM D4052	0.8817	0.8945
Viscosity cSt @ 40°C cSt @ 100°C	ASTM D445	147.1	478.9
	ASTM D445	14.89	30.08
Viscosity Index	ASTM D2270	101	98
Color	ASTM D1500	6.5	7.5

ORDERING INFORMATION

FLUID TYPE	PACKAGE	PART #	FLUID TYPE	PACKAGE	PART #
STARFIRE FULL SYN TRANS 50W	- PAIL -	#2490SYN50005	STARFIRE CONV. 90W GL-1	- PAIL -	#2490GL190005
STARFIRE FULL SYN 75W90 GL-5	- PAIL -	#24907590005	STARFIRE CONV. 80W90 GL-5	- PAIL -	#2490018090005
STARFIRE FULL SYN 75W140 GL-5	- PAIL -	#249075140005	STARFIRE CONV. 85W140 GL-5	- PAIL -	#24900185140005