



Gear Premium LS

Heavy-Duty Severe-Service Premium GL-5 Gear Oil — Limited-Slip Capable
Gear Assemblies, Differentials & Hypoid Gears (SAE 80W-90 / 85W-90 / 85W-140)

Rev: 2026-06-17

DESCRIPTION

TRIAx Gear Premium LS is a premium, very high-performance multi-purpose API GL-5 gear lubricant engineered for outstanding gearbox longevity in heavy-duty, severe-service applications. The formulation leverages top-tier base oils and a select polysulfide extreme-pressure (EP) additive system, coupled with state-of-the-art friction modifiers, to deliver anti-weld, anti-scuff, and anti-wear protection under both high- and low-speed conditions. Designed for commercial transmissions, axles, final drives, and hypoid gear assemblies — including limited-slip differentials — the shear-stable chemistry uses minimal viscosity improvers to resist degradation under high-load, high-torque conditions, prevents gear scuffing and premature wear, and maintains stable viscosity for very long fluid and transmission life.

PERFORMANCE HIGHLIGHTS

- **Extremely high load-carrying capability** — advanced polysulfide EP additives provide anti-weld and anti-scuff protection under severe shock loading
- **Prevents gear scuffing and premature wear** across both high- and low-speed operating conditions
- **Smooth, precise shifting** — eliminates sticky and notchy gear changes for efficient torque transfer
- **Limited-slip ready** — requires no additional friction modifiers or supplemental limited-slip additives in any LS axle or differential application
- **Shear-stable formulation** — minimal viscosity improvers protect against shear degradation for long fluid and gearbox life
- **Multi-purpose performance** — a single API GL-5 / GL-4 / MT-1 fluid for transmissions, axles, final drives, and hypoid gears
- **Broad OEM coverage** — meets or exceeds Arvin Meritor, Mack, MAN, Mercedes-Benz, Scania, Volvo, ZF, and military gear-oil specifications

SPECIFICATIONS & APPLICATIONS

TRIAx Gear Premium LS is recommended for on-highway heavy- and light-duty trucks, vans, cars, and buses requiring API GL-5 and/or MT-1 fluids, as well as off-highway construction, mining, agriculture, and quarrying equipment — gearboxes, torque converters, and front and rear differentials. It is approved for all limited-slip axle and differential applications, including heavy-duty limited-slip rear axles with integrated wet brakes, and requires no supplemental limited-slip additive.

Meets or exceeds the following OEM and industry specifications:

- API GL-5, GL-4, and MT-1
- AGMA 250.04 and AGMA 9005-E02
- AIST 224 • U.S. Steel 224
- Arvin Meritor 0-76-A/B/D/M/N/Q axles
- DAF (GL-5 axle lubricants)
- David Brown S1.53.101(E)
- DIN 51517 Part 3
- Eaton • Cincinnati Milacron
- Ford WSP-M2C197-A
- IVECO (J-2360)
- Komatsu KES 07.861
- Mack GO-J
- MAN 341 Z-1; 342 Type M1/M2/M3; M 3343 Type M
- Mercedes-Benz 235.0, 235.1, 235.5, 235.6, 235.8, 235.20
- MIL-PRF-2105D, MIL-PRF-2105E, PG-2 Limited Slip
- NATO O-226
- Renault (GL-5)
- Scania STO 1:0, 2:0A
- Volvo 97310 and Volvo 1273.10
- ZF TE-ML 02A/B, 05A/B/C4, 07A, 08, 12A/B/C4/E, 16A/B/C/D/E4/F, 17A/B, 19A/B/C, 21A/B
- SAE J-2360

TYPICAL PROPERTIES

Parameter (Test Method)	SAE 80W-90	SAE 85W-90	SAE 85W-140
Viscosity, Kinematic @ 40 °C, cSt (ASTM D445)	139	153	367
Viscosity, Kinematic @ 100 °C, cSt (ASTM D445)	15.1	15.3	27.0
Viscosity Index (ASTM D2270)	109	100	106
Flash Point, °C (°F) (ASTM D92)	212 (414)	216 (421)	206 (403)
Pour Point, °C (°F) (ASTM D97)	-36 (-33)	-36 (-33)	-15 (5)
Specific Gravity @ 60 °F (ASTM D1298)	0.87	0.90	0.90

These are typical values. There may be small differences in actual values which are a normal part of production and do not affect product performance.