Geartex LS

High performance limited slip axle lubricants

Product description

Geartex® LS are high performance automotive gear lubricants formulated for use in limited slip differentials, and conform to API service designation GL-5.

Geartex LS is available in SAE 80W-90, SAE 85W-90 and SAE 85W-140 grades, and is formulated with a mineral oil base in combination with an effective additive package, formulated to contribute to reliable limited slip differential performance and protection.

Customer benefits

- High performance friction modifier additive promotes smooth, noise free operation in limited slip differentials
- Robust EP formulation helps prevent component scuffing and wear
- Low temperature fluidity aids rapid lubricant circulation and wear protection during cold starts
- Reliable shear stability promotes consistent viscosity and system protection throughout fluid lifetime

Product highlights

- **Promotes smooth, noise free operation**
- **Aids protection against component scuffing and wear**
- **Designed to offer component wear protection during cold starts**
- **Contributes to protection throughout fluid lifetime**

Selected specification standards include:

API	ZF

Applications

- Geartex LS is specifically designed for use in automotive limited slip differential axles. The special friction modifier additive included in the formulation is approved by ZF for use in their limited slip systems
- Geartex LS may also be used in equipment requiring a standard GL-5 gear lubricant: hypoid drive axles, steering systems, non-synchronized transmissions and transaxles.
- The friction characteristics of Geartex LS make it unsuitable for use in synchronized manual transmissions and transaxles, and it should not be used in these applications
- Operating temperatures of above +100°C will lead to a significant reduction in the fluid service life. Peak operating temperatures should not exceed +120°C
- Geartex LS is not recommended for use in wet brake systems. These applications generally require products with a higher degree of friction modification, and may also generate higher temperatures than Geartex LS can withstand. Use 1000 THF in these applications.

Approvals, performance and suitable for use

Approvals

Viscosity grade	SAE 80W-90	SAE 85W-90	SAE 85W-140
ZF TE-ML 05C	X [1]	X [2]	
ZF TE-ML 16E	—	X [2]	X [3]
ZF TE-ML 21C	X [1]	X [2]	

[1] ZF Registration number: ZF000809
[2] ZF Registration number: ZF000810
[3] ZF Registration number: ZF001686

Performance

Viscosity grade	SAE 80W-90	SAE 85W-90	SAE 85W-140
API GL-5	X	X	X

Recommendations

Viscosity grade	SAE 80W-90	SAE 85W-90	SAE 85W-140
ZF TE-ML 05C			X [4]
ZF TE-ML 12C	X [5]	X [5]	X [5]
ZF TE-ML 16E	X	—	—

[4] Formerly approved, but ZF has changed the criteria for inclusion in this list.

[5] Formerly approved, but ZF has discontinued this list.

Typical test data

Test	Test methods	Results		
Viscosity Grade		**SAE 80W-90**	**SAE 85W-90**	**SAE 85W-140**
Shelf Life: 12 months from date of filling indicated on the product label.				
Density, 15 °C, kg/l	ASTM D4053	0.888	0.867	0.909
Flash Point COC, °C	ASTM D92	226	214	228
Pour Point, °C	ASTM D5950	-36	-30	-21
Viscosity, Kinematic, 100 °C, mm^2/s	ASTM D445	14.1	16.8	25.8
Viscosity, Kinematic, 40 °C, mm^2/s	ASTM D445	130	173	340
Viscosity Index	ASTM D2270	106	103	99
Viscosity, Brookfield, -12°C, mPa.s	ASTM D2983	—	16,000	105,000
Viscosity, Brookfield, -26°C, mPa.s	ASTM D2983	70,000	—	—

The typical test data set out above does not constitute a specification. It is indicative only and can be affected by allowable production tolerances. Chevron may modify this test data. Modified data will supersede all previous data, so please ensure you refer to the latest version of this Product Data Sheet (PDS).

When disposing of used product, take care to protect the environment and follow local legislation.

Safety Data Sheets (SDS's) are available for all Chevron products. If you require a SDS or any further information regarding a Chevron product, please contact your local sales office or see www.texacolubricants.com.

A **Chevron** company product