



Customer benefits

- Special friction modifier additive, giving the product the specific friction characteristics needed for smooth, noise free operation in limited slip differentials
- Excellent EP protection, protecting components against scuffing and wear
- Good low-temperature fluidity, superior to standard monograde products, allowing fast circulation during cold weather start-up
- Excellent shear stability, ensuring that the viscosity is retained throughout the fluid lifetime
- Reliable oxidation stability, preventing oil thickening during service
- Compatible with a wide variety of elastomer materials, preventing loss of fluid due to seal deterioration
- Excellent rust protection
- Good resistance to foaming

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 Textran TDH Premium in these applications.

Product features:

- **Geartex LS** is a range of automotive gear lubricants suitable for use in limited slip differentials. They conform to the API service designation GL-5.
- They are formulated with mineral base oils in combination with a high performance additive system.
- **Geartex LS** is available in the viscosity grades SAE 80W-90, SAE 85W-90 and SAE 85W-140.



Approvals, performance and recommendations

Approvals		80W-90	85W-90	85W-140
ZF	TE-ML 05C	X ^[1]	X ^[2]	X ^[3]
ZF	TE-ML 12C	X ^[1]	X ^[2]	X ^[3]
ZF	TE-ML 16E	–	X ^[2]	X ^[3]
ZF	TE-ML 21C	X ^[1]	X ^[2]	X ^[3]
Performance		80W-90	85W-90	85W-140
API	GL-5	X	X	X
Recommendations		80W-90	85W-90	85W-140
ZF	TE-ML 16E	X	–	–

^[1] ZF Registration number: ZF000809

^[2] ZF Registration number: ZF000810

^[3] ZF Registration number: ZF001686

Typical key properties

GEARTEX LS				
SAE Grade	ASTM	80W-90	85W-90	85W-140
Product Code		510342	510328	510341
Density, 15°C, kg/l	D4053	0.895	0.898	0.9087
Flash Point COC, °C	D92	214	218	222
Pour Point, °C	D97	-42	-34	-24
Viscosity, Kinematic				
mm ² /s @ 40°C	D445	14.7	16.7	24.9
mm ² /s @ 100°C	D445	135	170	318
Viscosity Index	D2270	110	103	100
Viscosity, Brookfield,				
mPa.s @ -12°C	D2983	–	12,000	42,000
mPa.s @ -26°C	D2983	70,000	–	–

Minor variations in product typical test data are to be expected in normal manufacturing.

2304

ENVIRONMENT, HEALTH and SAFETY

Information is available on this product in the Material Safety Data Sheet (MSDS) and Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. To obtain a MSDS for this product, visit www.caltex.com.

This bulletin was prepared in good faith from the best information available at the time of issue. While the values and characteristics are considered representative, some variation, not affecting performance, can be expected. It is the responsibility of the user to ensure that the products are used in the applications for which they are intended.

Produced by:
Chevron Global Lubricants
 – Asia Pacific