

Geartex® EP-5

Proven performance automotive gear oils

(Supersedes Geartex EP-B and Geartex EP-C)

Product description

Geartex EP-5 are proven performance automotive gear oils suitable for use in applications requiring API GL-5 performance. Formulated with mineral base stocks in combination with highly effective additives, these lubricants are available in viscosity grades SAE 80W-90, SAE 85W-90 and 85W-140.

Customer benefits

- High performance EP protection promotes resistance to component scuffing and wear
- Reliable shear stability contributes to consistent viscosity and system protection throughout fluid service life
- Low temperature fluidity performance helps ensure rapid lubrication and system wear protection during cold start-up
- Robust oxidation stability helps protect against in-service oil thickening, and aids system cleanliness

Product highlights

- Promotes system protection throughout fluid service life
- · Assists low temperature start-up protection
- · Contributes to scuffing and wear protection
- · Helps keep systems clean

Selected specification standards include:

API	Bosch
Daimler	MAN
US Military	Volvo
ZF	

Applications

- Geartex EP-5 products are designed for use in automotive hypoid drive axles, steering systems, nonsynchronized transmissions and transaxles which require a fluid with API GL-5 performance
- The friction characteristics of Geartex EP-5 products make them generally unsuitable for use in synchronized manual transmissions and transaxles, and they should not be used in these applications unless a GL-5 fluid is specifically recommended
- 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

Note that Daimler axle oil specifications include a minimum viscosity requirement that is not met by Geartex EP-5 SAE 80W-90. Although this viscosity grade is suitable for use in MB 235.0 applications, use Geartex EP-5 SAE 85W-90 if an approved product is required

Approvals, performance and recommendations

Approvals

Viscosity grade		80W-90	85W-90	85W-140
Daimler	MB 235.0	_	X	_
ZF	TE-ML 16B	X [8]	_	_
ZF	TE-ML 16C	_	X [9]	_
ZF	TE-ML 16D	_	_	X ^[10]
ZF	TE-ML 17B	X [8]	X [9]	_
ZF	TE-ML 19B	X [8]	X [9]	_
ZF	TE-ML 21A	X [8]	X [9]	X [10]

Performance

Viscosity grade		80W-90	85W-90	85W-140
API	GL-5	Χ	Χ	Χ
Bosch	TE-ML 08	X [7]	X ^[7]	X [7]
US Military	MIL-L-2105D	Χ	_	Χ
Volvo	97310-90	Χ	Χ	_
Volvo	97310-91	_	_	Χ
<i>7</i> F	TE-ML 07A	X [1,4]	X [1,5]	X [1,5]

Recommendations

Viscosity grade		80W-90	85W-90	85W-140
Daimler	MB 235.0	Χ	_	_
MAN	342 Type M1	X [11]	X [11]	_
ZF	TE-ML 05A	X [3]	X [3]	X [3]
ZF	TE-ML 12A	X [2]	X [11]	X [2]
ZF	TE-ML 19B	_	_	X [6]

- Products meeting the necessary requirements for this specification are approved without listing
- ² Obsolete specification
- ³ Previously approved, but ZF has changed the technical requirements for inclusion in this list
- ⁴ For outside temperatures above -26°C
- ⁵ For outside temperatures above -12°C
- ⁶ Previously approved, but SAE 85W-140 grades are no longer approved for this application.
- List formerly administered by ZF. Products meeting the necessary performance requirements are approved for use, but there is no product listing.
- ⁸ ZF approval number: ZF002279.
- ⁹ ZF approval number: ZF002278.
- ¹⁰ ZF approval number: ZF002280.
- ¹¹ Obsolete specification. Product was previously approved.

Typical test data					
Test	Test methods	Results			
Viscosity Grade		SAE 80W-90	SAE 85W-90	SAE 85W-140	
Shelf Life: 60 months from date of filling indicated on the product label.					
Density, 15 °C, kg/l	ASTM D4053	0.885	0.892	0.906	
Flash Point COC, °C	ASTM D92	218	210	220	
Pour Point, °C	ASTM D5950	-39	-35	-18	
Viscosity, Kinematic, 100 °C, mm²/s	ASTM D445	14.3	17.0	26.2	
Viscosity, Kinematic, 40 °C, mm ² /s	ASTM D445	132	177	349	
Viscosity Index	ASTM D2270	107	103	100	

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This supersedes all previous editions and information contained in them.

<u>Disclaimer</u> Chevron accepts no liability for any loss or damage suffered as a result of using this product for any application other than applications specifically stated in any Product Data Sheets.

<u>Health, safety, storage and environmental</u> Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application and in accordance with the recommendations provided in the Material Safety Data Sheet (MSDS). MSDSs are available upon request through your local sales office, or via the Internet. This product should not be used for purposes other than its intended use. When disposing of used product, take care to protect the environment and follow local legislation.