



DRIVE FE LONG LIFE GEAR OIL

PRODUCT DESCRIPTION:

DRIVE FE is a fully synthetic fluid specially designed to meet ZF's extended drain interval requirements (540,000 km). It is recommended for use in all ZF commercial manual and automated gearboxes, both synchronized and non-synchronized, operating under the most demanding conditions of load, speed, and temperature. It can also be recommended for other manual transmissions requiring API GL-4, making it particularly suitable for severe applications with higher loads and temperatures.

APPLICATION:

DRIVE FE is specifically developed for all ZF gearboxes with or without Intarder allowing a drain interval up to 540,000 km. This lubricant is particularly suited for latest ZF gearboxes with Carbon synchronization (ZF TE-ML 01E) and for ZF gearboxes with Molybdenum synchronization (ZF TE-ML 02E). DRIVE FE 75W-80 meets the requirements of VOLVO 97307 (Drain interval up to 400,000 km), MAN 341 type Z5 (Drain interval up to 500,000 km) with or without Intarder, Retarder application VOITH CLASS C, MAN 341 type VR and MB 235.28. DRIVE FE is also suitable for extended drain intervals on gearboxes of commercial vehicles from Renault Trucks, DAF, Iveco and for all commercial vehicles equipped with manual and automated gearboxes and any application requiring an API GL-4 level of performance.

FEATURES & BENEFITS:

- Excellent frictional characteristics with carbon, sinter bronze and molybdenum synchronizers provides improved shift quality and extends component life.
- Reduced cost of maintenance due to extended drain intervals.
- Excellent lubrication at low and high temperatures.
- Excellent protection of gearboxes against wear and corrosion due to extreme-pressure properties of oil.
- Excellent low temperature fluidity due to a high viscosity index, generating benefits during cold starts and limiting drag losses and fuel consumption.
- Improved gear engagement.
- Excellent thermal and oxidative stability extends the life of transmission and lubricant.

PERFORMANCE LEVELS / MEETS OR EXCEEDS:

SAE GRADES	75W-80
API	GL-4
VOITH	CLASS C
VOLVO	97305/ 97307
MAN	341 E3/Z3/Z4/Z5
MB	235.28
ZF	TE-ML 01E/02E/16P/01L/02D/02L/16K/08

TYPICAL PROPERTIES:

PARAMETERS	ASTM	UNIT	DRIVE FE
			75W-80
KV@ 104°F /40°C	D7042	cSt	TBR
KV @ 212°F /100°C	D7042	cSt	9.4
Viscosity Index	D2270	-	140
Density@15°C	D4052	g/cm3	TBR
Flash Point (min)	D92	°C	200
Pour Point (max)	D97	°C	-42
Brookfield Viscosity	D2983	cp	50,000(-40C)

DISCLAIMER: The test data provided above is for reference purposes and is not a strict specification, as variations within acceptable production tolerances may occur. Phoenix reserves the right to update or revise this test data. For the most accurate and up-to-date information, please consult the latest version of this Technical Data Sheet (TDS).

HEALTH & SAFETY, ENVIRONMENT:

Prolonged and repeated contact with oil may cause skin disorders. Avoid contact. Wash immediately with soap and water. Do not discharge used oil in to drains or the environment. Dispose to an authorized used oil collection point. For further Information on Safety Guidelines please refer to MSDS available on our website Phoenixlubricants.com