

# Multigear® MTF HD

# Ultra high performance heavy-duty synthetic automotive gear lubricant

# Product description

Multigear MTF HD is an ultra high performance synthetic automotive gear lubricant designed for use in heavy duty synchromesh manual truck transmissions. With a fully synthetic base stock, Multigear MTF HD is formulated with a balanced additive combination.

Multigear MTF HD offers a long-drain capability of at least 400,000 km and promotes a reduction in transmission maintenance and overhauls.

### Customer benefits

- Long-drain capability of at least 400,000 km, contributes to reduced transmission overhauls and downtime
- High performance low temperature fluidity assists rapid lubricant circulation and component protection at cold start-up
- Promotes rust and corrosion protection of ferrous and yellow metals in gears and bearings
- High VI formulation assists reliable high temperature viscosity retention, lubrication performance and system protection
- Shear stability performance contributes to robust viscosity retention and system protection throughout fluid service life
- Specially tuned friction characteristics promote smooth, easy shifting
- Highly durable friction properties assist consistent performance throughout fluid lifetime
- Extreme pressure performance offers resistance to gear scuffing and system wear
- Reliable oxidation stability aids protection against sludge, varnish, lacquer and harmful deposits, keeping components clean

- Compatible with a wide range of elastomers, helping prevent seal deterioration and fluid loss
- Up to 3% fuel economy improvement compared to conventional fluids, when used in combination with Syn-Star GL 75W-90 in drive axles

# Product highlights

- · Up to 3% fuel economy improvement
- · Long-drain capability of at least 400,000 km
- · Assists component protection at cold start-up
- · Promotes rust and corrosion resistance
- Aids reliable high temperature protection
- · Contributes protection against scuffing and wear

#### Selected specification standards include:

API	DAF
Daimler	Eaton
MAN	Volvo
ZF	

# **Applications**

 Multigear MTF HD is designed for extended drain in heavy duty synchronized manual truck transmissions.
In addition to its formal OEM approvals, field trial data has been amassed demonstrating its capability for extended drain in numerous other truck applications.
Field trial vehicles include those manufactured by MAN, Mercedes, Scania and Volvo; transmissions include those manufactured by the truck constructors themselves and by ZF, including AS Tronic models and models fitted with intarders

Note that ZF mandates the use of a product with a formal TE-ML 02E approval during the warrantee period. Multigear MTF HD may be used in these applications after the end of the warrantee period.

# Approvals, performance and recommendations

#### **Approvals**

Eaton	Synthetic (500,000 km/3 years)	Approved
Volvo	97305	Approved

### **Performance**

API	GL-4	Performance level
DAF	Gearbox oil for Eaton gearboxes	Meets requirements
Daimler	MB 235.4	Suitable for use
Daimler	MB 235.11	Suitable for use
MAN	341 Type E4	Meets requirements
MAN	341 Type Z4	Suitable for use
Volvo	97307	Performance level
ZF	TE-ML 02 (400,000 km/3 years)	Suitable for use

Typical test data				
Test	Test methods	Results		
Product Code		01291		
Density, 15°C, Kg/L	ASTM D1298	0.8645		
Flash Point COC, °C	ASTM D92	244		
Pour Point, °C	ASTM D97	-54		
Viscosity, Kinematic, 100°C, mm²/s	ASTM D445	9.17		
Viscosity, Kinematic, 40°C, mm²/s	ASTM D445	54.1		
Viscosity, Brookfield, -26°C, mPa.s	ASTM D2983	3670		
Viscosity, Brookfield, -40°C, mPa.s	ASTM D2983	19300		
Viscosity Index	ASTM D2270	151		

<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.

Health, safety, storage and environmental 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.

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