



PETRONAS Tutela MTF 700 HD

75W-80

Designed to be the Fluid Technology Solution of choice providing excellent protection and longer oil life for manual transmissions

Description and Applications

PETRONAS Tutela MTF 700 HD is a premium fully synthetic Manual Transmission Fluid for buses, coaches and commercial vehicles delivering extended drain intervals and total protection even in most severe conditions for today's manual and automated transmissions, with or without interarder or retarders. Its wide coverage of major manufacturer specifications, thanks to extensive bench testing and field-testing, makes it suitable for use in virtually all heavy-duty manual and automated transmissions.

PETRONAS Tutela MTF 700 HD meets the stringent requirement of most OEMs transmissions, approved by, MAN and ZF, fitted with Carbon, Molybdenum or traditional synchronizer materials; for this reason, it makes possible to reduce warehouse complexity, limiting possible damages due to wrong oil selection.

Benefits

PETRONAS Tutela MTF 700 HD enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- **Fuel Economy** performance by **optimized transmission efficiency**:
 - o A lower viscosity fluid to help reduce operational energy losses.
- **Extended Drain Interval and Transmission Life** driven by:
 - o Exceptional thermal and oxidation stability under high temperature, providing viscosity stability and preventing formation of deposits and sludge to prolong oil life even under severe conditions
 - o Enhanced shear stability for a constant film strength and effective lubrication during the oil service life to protect all moving parts
 - o Excellent anti-wear, gear and bearing protection under severe conditions to extend components life
 - o Extended transmission fluid life and prevention against fluid breakdown at higher operating temperatures for a total protection of the transmission

Provides outstanding Driving Experience through:

- **Outstanding synchronizer performance** at a wide temperature range for a comfortable shifting and driving even under severe conditions
- **Exceptional low temperature viscosity** for improved lubrication during start-up and shifting comfort in cold conditions
- **Significantly reduced transmission noise**

Approvals, Specifications and Recommendations

Specifications:

- API GL-4
- Bosch TE-ML 08
- ZF TE-ML 08

Approvals:

- MAN 341 Type Z4
- ZF TE-ML 01L, 02L, 16K

Performance Level:

- DAF
- Eaton Europe (300.000km 3 years)
- IVECO 18-1807 Class MGS1
- Renault Note technique B0032/2 Annex 3
- Volvo 97307

Note: Always consult your owner's manual to check recommended viscosity grade and specifications for your specific vehicle

Typical Physical Data

Parameters	Method	Unit	Typical Value
Appearance	-	-	Bright & Clear
Density @15°C	ASTM D 4052	g/cm ³	0.860
Kinematic Viscosity @100°C	ASTM D 445	mm ² /s (cSt)	9.6
Kinematic Viscosity @40°C	ASTM D 445	mm ² /s (cSt)	59
Viscosity Index	ASTM D 2270	-	156
Brookfield Viscosity @-40°C	ASTM D 2983	mPa.s (cP)	63000
Pour Point	ASTM D 97	°C	-42
Flash Point COC	ASTM D 92	°C	236

All technical data is provided for reference only. These characteristics are typical of current production. Whilst future production will conform to PLI's specification, variations in these characteristics may occur.

Health, Safety and Environment

This product is unlikely to present any significant health and safety hazards when used in the recommended application. Avoid contact with skin. Wash immediately with soap and water after skin contact. Do not discharge into drains, soil or water.

For further detail regarding storage, safe handling, and disposal of product, please refer to product SDS or contact us at: www.pli-petronas.com

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