



# RAVENOL ATF ZMS

**Kategorie:** Gear oil for automatic transmissions

**Artikelnummer:** 1211102

**Oil type:** Synthetic

**Recommendations:** MAN 339 Z3, MAN 339 Z4, ZF 0671 072 120, ZF 0671 072 130, ZF TE-ML 04D, ZF TE-ML 14E, ZF TE-ML 16N, ZF TE-ML 16Q, ZF TE-ML 20F

**Application:** Truck



**RAVENOL ATF ZMS** was developed with a high-quality synthetic base oil and a special selection of additives and inhibitors to produce excellent thermal and oxidation stability and adhesion factor performance. This guarantees the perfect functioning of the automatic transmission.

**RAVENOL ATF ZMS** demonstrates excellent flow properties at low temperatures.

**RAVENOL ATF ZMS** is a new generation ATF (Automatic-Transmission-Fluid) for ZF automatic transmissions of commercial vehicles. Guarantees maximum wear protection in every operating status.

**RAVENOL ATF ZMS** supports oil-change intervals up to 150,000 km, or a maximum of up to 3 years.

**RAVENOL ATF ZMS** enhances the reliability of older ZF transmissions, counters vibrations, ensures particularly soft gear changes as well as good driving comfort and also possesses friction-reducing properties.

**RAVENOL ATF ZMS** can contribute towards optimizing your servicing and operating costs by extending oil-change intervals. It is particularly recommended for applications with oil sump temperatures from 80°C up to 110°C according to ZF specification.

- 1L | 1211102-001
- 4L | 1211102-004
- 10L | 1211102-010
- 20L | 1211102-020
- 20L | 1211102-B20
- 60L | 1211102-060
- 208L | 1211102-208
- 208L | 1211102-D28
- 1000L | 1211102-700

## Application instructions

**RAVENOL ATF ZM** was specially developed for heavy-duty ZF automatic transmissions used in local and regional public transport systems. Extreme loads, such as e.g. demanding topography, stop-and-go traffic and frequent retarder operation are not a problem for **RAVENOL ATF ZM**.

**RAVENOL ATF ZM** can be mixed with all ATF types of the ZF lubricant list TE-ML 04D. Oil and filter change intervals for Ecomat transmissions in busses up to 150,000 km, or every 3 years. Oil and filter change intervals for Ecomat transmissions in trucks, construction machinery and special vehicles during normal use (fire engines, construction vehicles and dumpers with high driving distances) after 2000 h or every 2 years.

Oil and filter change intervals under demanding conditions (refuse collection vehicles, vehicles with high off-road times (low distance, high gear shift rate) after 1500 h or once a year.

## Characteristics

- Very good lubricant properties, even in low winter temperatures

- High, stable viscosity index
- Very good oxidation stability
- Excellent protection against wear, corrosion and frothing
- Excellent friction coefficient consistency
- High thermal and oxidative stability
- Excellent cooling properties

## Technical Product Data

CHARACTERISTICS	PROPERTY	DATA	AUDIT
Colour		blau	VISUELL
Density at 20 °C	kg/m <sup>3</sup>	843,0	EN ISO 12185
Pourpoint	°C	-51	DIN ISO 3016