TECHNICAL DATASHEET

MARATHON MAX 10W-40

Fully synthetic lubricant for supercharged Diesel engines equipped with post-treatment systems (particle filters, etc.)

MARATHON MAX 10W-40 is a very high quality synthetic oil. The new additives technology provides the very best performances as it does not contain any heavy metals. This is particularly advantageous in vehicles fitted with particle filters or catalytic converters as these systems are not clogged up or contaminated by this new additive technology.
Likewise, deposits in the turbocharger are reduced to zero and **MARATHON MAX 10W-40** ensures optimum use of the turbocharger.

SPECIFICATIONS

• Specifications:

- ✓ **ACEA E11, E9, E8, E7, E6, E4**
- ✓ **API CK-4/CJ-4**
- ✓ **JASO DH-1/DH-2/DL-0**

• Recommandations

- ✓ **CATERPILLAR ECF-3**
- ✓ **CUMMINS CES 20081 / 20086**
- ✓ **DETROIT DIESEL 93K218 / 93K222**
- ✓ **DEUTZ DQC IV-18 LA**
- ✓ **IVECO 18-1804 CLASSE TLS E9**
- ✓ **IVECO 18-1809 CLASSE NG2**
- ✓ **LH-00-ENG LA**
- ✓ **MACK EOS-4.5**
- ✓ **MAN M 3271-1 / 3477 / 3575 / 3775**
- ✓ **MB 228.31 / 228.51 / 228.52**
- ✓ **MTU DDC TYPE 2.1 / 3.1**
- ✓ **RENAULT RLD-3 / RLD-4**
- ✓ **SCANIA LA**
- ✓ **VOLVO VDS-4.5**
- ✓ **VOITH-RETARDER „B"**

APPLICATIONS

Suitable for the latest engines equipped with particle filters, including Euro 6 engines.

Also suitable for engines that run on gas.

MAIN PROPERTIES

- Protects post-treatment systems thanks to a very low level of sulphated ash, sulphur and phosphorus.
- Excellent resistance to wear, even under full load.
- Reduces pollutant emissions
- Protects against corrosion even if diesel fuels are higher in sulphur.
- Reduces deposits in the engine and turbocharger, and is therefore more reliable and reduces maintenance costs.
- Reduces oil consumption due to low loss by evaporation.
- Reduces fuel consumption by around 3% compared with conventional oils.

TECHNICAL CHARACTERISTICS

MEAN CHARACTERISTICS	UNIT	MEAN VALUE	METHODS
SAE grade		**10W-40**	
Density at 15°C	kg/m³	850	NFT 60101
Viscosity at 40°C	mm²/s	90.4	DIN 51562-1
Viscosity at 100°C	mm²/s	13.8	DIN 51562-1
Viscosity index		155	NFT 60136
Flash Point	°C	230	DIN ISO 2592
Pour Point	°C	-33	DIN ISO 3016
T.B.N.	mgKOH/g	13.4	DIN 51639-1