

## Description

Latest technology THPD (Top High Performance Diesel) lubricant oil designed to comply with the most demanding requirements of EURO VI and North American latest generation diesel engines (EPA 2007). Its low ash content (MID SAPS) ensures perfect performance in the post-treatment of exhaust gases incorporated in the most modern vehicles. Specially recommended for engines that require API CK-4 quality level and that use a low sulphur content fuel.

## Properties

- It can be used when biodiesel is used as a fuel, following the recommended drain intervals established by the manufacturers.
- Multigrade oil that resists extremely high temperatures and minimises contaminant emissions because of its compatibility with exhaust gas post-treatment systems.
- It exceeds the demands of modern Euro VI engines (Volvo, Mercedes Benz, Renault) and EPA 2007 (Cummins, Detroit Diesel, Mack, MTU), covering the needs of any mixed fleet.
- Its carefully studied formula reduces oil consumption, deposit levels on pistons and offers better control of viscosity and oxidation stability.
- It can be used in earlier engines according to manufacturers' specifications, and it also increases performance in comparison to traditional, heavy diesel oils.
- Depending on service conditions and EURO VI engine type, this product can prolong the oil drain interval period, provided the recommendations of the engine manufacturer are followed.
- Results tested on different engines with major reduction in wear and improved dispersion of soot and other contaminants.

## Quality levels, approvals and recommendations

- API CK-4/CJ-4/CI-4 Plus/CI-4/SN\*
- Renault RLD-3\*
- MACK EO.S-4.5\*
- ACEA E7/E9
- MTU Type 2.1\*
- CUMMINS CES 20086
- MB-Approval 228.31\*
- DEUTZ DQC III-10 LA\*
- Ford WSS-M2C171-F1
- VOLVO VDS-4.5\*
- DETROIT DIESEL 93K222\*
- CATERPILLAR ECF-3
- MAN 3775\*

\*Formal approval

## Technical specifications

	UNIT	METHOD	VALUE
SAE Grade			15W-40
Density at 15 °C	g/mL	ASTM D 4052	0.877
Viscosity at 100 °C	cSt	ASTM D 445	15.0
Viscosity at 40 °C	cSt	ASTM D 445	113.5
Viscosity at -20 °C	cP	ASTM D 5293	< 7000
Viscosity index	-	ASTM D 2270	136
Flash point, open cup	°C	ASTM D 92	> 200
Pour point	°C	ASTM D 97	< -27
T. B. N.	mg KOH/g	ASTM D 2896	9.8
Bosch Injector Shearing:	cSt	CEC L-14-A-93	> 12.5
Sulphated ashes	% weight	ASTM D 874	0.9

The above mentioned characteristics are typical values and should not be considered product specifications.