



## Description

THPD (Top High Performance Diesel) synthetic lubricant oil designed to meet the most demanding requirements for next generation EURO III, EURO IV and EURO V diesel engines. Product specifically designed for the most modern vehicles requiring ACEA E7, API CI-4 lubricants. Its carefully prepared formula enables a longer oil change period.

## Properties

- Can be used when biodiesel is used as a fuel, following the recommended change periods established by the manufacturers.
- Multigrade oil encompassing a wide range of temperatures; very stable and excellent shearing resistance, it maintains its design viscosity during the whole life of the oil.
- Great detergent dispersant power, ensuring total cleanliness of the engine elements. Exceptional soot dispersion capacity, which means it is specially recommended for engines fitted with EGR-type emission reduction systems.
- It prevents casing polishing of cylinders, which is so typical of large horsepower supercharged engines.
- Prevents the formation of lacquers and varnishes thanks to its dispersant additives.
- Its alkaline reserve (TBN) enables it to protect the engine against corrosion by neutralising the acids formed in the combustion of diesel with different sulphur contents.
- According to service conditions and the type of EURO III, EURO IV and EURO V engine, this product may prolong the oil change period, though the engine manufacturer's recommendations must always be followed.

## Quality levels, approvals and recommendations

- ACEA E7
  - API CI-4/SL\*
  - CATERPILLAR CAT ECF-2/ECF-1-a
  - CUMMINS CES 20076/20077
  - DEUTZ DQC III-10\*
  - DTNA DFS 93K215
  - MACK EO-N\*
  - MAN M 3275-1
  - MB 228.3\*
  - MTU Type 2
  - RENAULT VI RLD/RLD-2\*
  - VOLVO VDS-3\*
- \*Formal approval

## Technical specifications

	UNIT	METHOD	VALUE
SAE Grade			10W-40
Density at 15 °C	g/cm3	ASTM D4052	0.872
Kinematic viscosity at 40 °C	cSt	ASTM D445	90
Kinematic viscosity at 100 °C	cSt	ASTM D445	14.6
CCS Viscosity at -25 °C	cP	ASTM D5293	<7,000
Viscosity index	-	ASTM D2270	150
Flash point, open cup	°C	ASTM D92	225
Pour point	°C	ASTM D97	-30
Shearing Inj.Bosch: Vis 100 °C (90 cy)	cSt	CEC L-14-93	>12.5
Sulphated ashes	% in weight	ASTM D874	1.3
TBN	mg KOH/g	ASTM D2896	10

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