

# LUKOIL AVANTGARDE PROFESSIONAL LE 10W-40

High quality multigrade Low SAPS engine oil

## APPROVALS

**API** CJ-4; **MAN** M 3575/3477/3271-1; **Mack** EO-O PP; **Renault** VI RLD-3; **VOLVO** VDS-4; **MB-Approval** 228.51; **Scania** LA; **MTU** Oil Category 3.1; **Deutz** DQC IV-10 LA; **Cummins** CES 20081; **PJSC "Avtodizel" (YMZ)**

## MEETS REQUIREMENTS

**ACEA** E4/E6/E7/E9; **MTU** Oil Category 2.1; **MB** 228.31; **JASO** DH-2; **DDC** 93K218; **Caterpillar** ECF-3

## PRODUCT DESCRIPTION

**LUKOIL AVANTGARDE PROFESSIONAL LE 10W-40** – is a high performance engine oil for use in high-speed heavy duty diesel engines, including engines with Diesel Particulate Filters. Thanks to well-balanced technology «Low Emissions», which combines high Total Base Number with low sulphated ash level, **LUKOIL AVANTGARDE PROFESSIONAL LE 10W-40** meets the requirements of all four European heavy duty diesel engine oil specifications: ACEA E4, E7, E6 and E9.

## APPLICATION

**LUKOIL AVANTGARDE PROFESSIONAL LE 10W-40** is designed for use in the latest heavy duty diesel engines of world's leading manufacturers (MAN, Mercedes-Benz, Scania, Volvo, MTU, Deutz,

Cummins, etc.), including engines equipped with turbochargers, Exhaust Gas Recirculation (EGR) systems and Selective Catalytic Reduction (SCR) systems. Provides extended drain intervals and can be used in engines fueled by ULSD (Ultra Low Sulphur Diesel).

## BENEFITS

- High thermal and oxidation stability
- Guarantees easy engine start at low temperatures due to excellent low-temperature properties
- Excellent fuel economy performance
- Specifically designed for Euro VI engines
- Well-balanced technology "Low Emissions" allows to use this oil in both new engines, equipped with aftertreatment devices and conventional engines

The product name in an order:

Motor oil LUKOIL AVANTGARDE PROFESSIONAL LE 10W-40, STO 79345251-072-2015

## TYPICAL TEST DATA

PROPERTY	Test methods	LUKOIL AVANTGARDE PROFESSIONAL LE 10W-40
Density at 15 °C, kg/m <sup>3</sup>	ASTM D1298 / ASTM D4052	859.3
Kinematic viscosity at 100 °C, mm <sup>2</sup> /s	ASTM D445	13.95
Viscosity index	ASTM D2270	156
Cold Cranking Viscosity (CCS) at -25 °C, mPa·s	ASTM D5293 / GOST R 52559	6,010
Total Base Number, mg KOH/1 g oil	ASTM D2896	13
Borderline Pumping Viscosity (MRV) at -30 °C, mPa·s	ASTM D4684 / GOST R 52257	17,000
Sulphated ash, %	ASTM D874	1.0
Noack evaporation loss, %	ASTM D5800 / DIN 51581-1	8.7
Flash Point, COC, °C	ASTM D92	228
Pour Point, °C	GOST 20287 B	-42

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved by OOO "LLK-International"