

LUKOIL AVANTGARDE PROFESSIONAL LE 5W-30

High quality multigrade Low SAPS engine oil

APPROVALS

API CJ-4; **MAN** M 3677/3477/3271-1/3575; **Scania** LDF-4; **Renault** VI RLD-3; **Mack** EO-O PP; **VOLVO** VDS-4; **Scania** LA; **MTU** Oil Category 3.1; **MB-Approval** 228.51/228.31; **Deutz** DQC IV-10 LA; **PJSC "Avtodizel" (YMZ)**

MEETS REQUIREMENTS

ACEA E4/E6/E7/E9; **Ford** WSS-M2C213-A1; **Detroit Diesel** DFS 93K218; **ZF TE-ML** 07D; **Caterpillar** ECF-3; **MTU** Oil Category 2.1; **Cummins** CES 20081

PRODUCT DESCRIPTION

LUKOIL AVANTGARDE PROFESSIONAL LE 5W-30 – 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 5W-30** meets the requirements of all four European heavy duty diesel engine oil specifications: ACEA E4, E7, E6 and E9.

APPLICATION

LUKOIL AVANTGARDE PROFESSIONAL LE 5W-30 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 turbocharges, 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
- Great dispersant and detergent properties prevent deposits formation on engine parts
- 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 synthetic SAE 5W-30, STO 79345251-072-2015

TYPICAL TEST DATA

| PROPERTY | Test methods | LUKOIL AVANTGARDE PROFESSIONAL LE 5W-30 |
|---|---------------------------|---|
| Density at 15 °C, kg/m ³ | ASTM D1298 / ASTM D4052 | 858.4 |
| Kinematic viscosity at 100 °C, mm ² /s | ASTM D445 | 12.23 |
| Viscosity index | ASTM D2270 | 166 |
| Dynamic viscosity (CCS) at -30°C, mPa·s | ASTM D5293 / GOST R 52559 | 6,500 |
| Total Base Number, mg KOH/1 g oil | ASTM D2896 | 12.9 |
| Dynamic viscosity (MRV) at -35°C, mPa·s | ASTM D4684 / GOST R 52257 | 28,400 |
| Sulphated ash, % | ASTM D874 | 0.94 |
| Noack evaporation loss, % | ASTM D5800 / DIN 51581-1 | 11.6 |
| Flash Point, COC, °C | ASTM D92 | 230 |
| Pour Point, °C | GOST 20287 B | -45 |

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"