

## LUKOIL AVANTGARDE ULTRA 5W-40

Multigrade engine oil for heavy-duty diesel engines

### Specifications

- API CI-4
- PJSC «Avtodizel» (YMZ)
- Cummins CES 20078
- Mack EO-N
- MB 228.3
- VOLVO VDS-3
- MTU Oil Category 2
- ACEA E7
- PJSC "KAMAZ"
- Deutz DQC III-10
- MAN M 3275-1
- Renault VI RLD-2
- Caterpillar ECF-2/1-a
- JASO DH-1

### Product description

High-quality multigrade engine oil for heavy-duty diesel engines (both non-charged and turbocharged), operating under severe conditions. It is formulated with synthetic and highly refined mineral base oils with a high-performance additive package, which keeps the engine clean and provides excellent anti-wear and anti-oxidant properties.

### Application

It is recommended for use in diesel engines without particulate filters (DPF) and is suitable for use in some engines, equipped with EGR and SCR NO<sub>x</sub> reduction systems. Designed for diesel engines up to Euro-5 ecological standard, where API CI-4 performance level is required. It can also be used in gasoline engines for which API SL oils are recommended.

### Benefits

#### ENGINE CLEANLINESS

Improved detergency and dispersancy

#### MAXIMUM PROTECTION

Excellent protection against wear

#### EASY COLD START

Excellent low-temperature properties provide easy cold start

The product name in an order: Engine oil LUKOIL AVANTGARDE ULTRA semi-synthetic SAE 5W-40 API CI-4/SL, STO 00044434-026-2013

### Typical test data

The information given in the typical data does not constitute a specification and can be affected by allowable production tolerances. The right to make modifications is reserved by OOO «LLK-International»

Property	Test methods	Value
Kinematic viscosity at 100 °C, mm <sup>2</sup> /s	ASTM D445	13.9
Density at 20 °C, kg/m <sup>3</sup>	ASTM D1298 / ASTM D4052	848
Viscosity index	ASTM D2270	172
Dynamic viscosity (CCS) at -30°C, mPa·s	ASTM D5293 / GOST R 52559	5,900
Noack evaporation loss, %	ASTM D5800 / DIN 51581-1	9.1
Total Base Number, mg KOH/1 g oil	GOST 11362	11.5
Sulphated ash, %	ASTM D874	1.1
Flash Point, COC, °C	ASTM D92	235
Pour Point, °C	GOST 20287 B	-48