

# **LUKOIL AVANTGARDE SAE 50, 60, API CF/CD/SF**

Series of engine oils for combined domestic vehicle park meeting Euro 1 and Euro 2 requirements

### **MEETS REQUIREMENTS**

API CF/CD/SF

**AAE** (Association of Automotive Engineers) " $\mu$ 2/ $\mu$ 3"

## **PRODUCT DESCRIPTION**

**LUKOIL AVANTGARDE SAE 50, 60** are series of high quality seasonal (summer) engine oils (in accordance with SAE J 300). According to GOST 17479.1-85 the oils are denoted as M-20 (SAE 50) and M-24 (SAE 60).

**LUKOIL AVANTGARDE API CF/CD/SF** are formulated using highly refined mineral base stocks and carefully selected additives package.

The oils meet requirements of API CF/CD/SF and provide significantly improved protection against varnish, oxidation and possess improved EP properties as compared to GOST engine oils of "\Gamma" and "\Gamma" performance category.

**LUKOIL AVANTGARDE API CF/CD/SF** increases drain interval up to 40% in comparison with M-xG $_{2k}$ , M-xDM oils.

#### **APPLICATION**

**LUKOIL AVANTGARDE SAE 50, 60** are designed for commercial vehicles with diesel supercharged engines under severe conditions. These oils are also recommended for diesel engines of commercial vehicles and passenger cars, naturally aspirated petrol engines in accordance with OEM recommendation. The oils can be used in diesel and petrol engines not exceeding Euro 2 requirements.

**LUKOIL AVANTGARDE SAE 50, 60** work effectively in domestic off-road, municipal, construction and agricultural vehicles equipped with YaMZ or KAMAZ engines (up to Euro 2 level), which require API CF/CD/SF level motor oil.

**LUKOIL AVANTGARDE SAE 50, 60** are intended for use in engines of machinery which operates in southern regions or in cases where "M-10" motor oil viscosity is not enough.

The product name in an order:

Motor oil LUKOIL AVANTGARDE SAE 50, API CF/CD/SF, STO 00044434-026-2013 Motor oil LUKOIL AVANTGARDE SAE 60, API CF/CD/SF, STO 00044434-026-2013

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#### **TYPICAL TEST DATA**

Property	Test methods	ЛУКОЙЛ АВАНГАРД	
		SAE 50	SAE 60
Density at 15°C, kg/m <sup>3</sup>	GOST R 51069 / ASTM D4052 / ASTM D1298	902.6	906.2
Kinematic viscosity at 100 °C, mm <sup>2</sup> /s	GOST 33 / ASTM D445 / GOST R 53708	19.1	23.3
Viscosity Index	GOST 25371 / ASTM D2270	91	93
Total Base Number, mg KOH/1 g oil	GOST 11362	9.3	9.3
Total Base Number, mg KOH/1 g oil	GOST 30050 / ASTM D2896	8.5	8.5
Pour Point, °C	GOST 20287 B	-15	-17
Flash Point, COC, °C	GOST 4333 / ASTM D92	248	276
Sulphated ash, %	GOST 12417 / ASTM D874	1.4	1.4
Noack evaporation loss, %	ASTM D5800	3.2	2.6

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".

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