

# LUKOIL EFFORSE 4004

High performance low ash oil for gas engines

## APPROVALS

**GE-Jenbacher** TA 1000-1109 Series 2, 3, 4 (Version A, B) Series 6 (Version C, E, F). Class A fuel  
**Wartsila** 175SG, 220SG, 25SG, 28SG, 34SG, 50SG, 20DF, 32DF, 34DF, 50DF  
**MAN** Diesel & Turbo  
**Mitsubishi** HIET  
**JSC "VDM PLANT"**

## MEETS REQUIREMENTS

**Caterpillar** 3300, 3400, 3500, 3600 Series (SEBU 6400)  
**MTU** MLT 5074, A001061/29E (Category 1), Onsite Energy 400 & 4000 series  
**Guascor** FGLD, SFGLD  
**Waukesha**  
**MWM** TR 0199-99-2105  
**MAN** M 3271-2  
**Perkins engine series** 4000  
**Cummins** QSV 81G, 91G, 60G

## PRODUCT DESCRIPTION

**LUKOIL EFFORSE 4004** is a low ash mineral oil for use in gas engines. Designed for high output naturally aspirated and turbocharged gas engines in stationary applications running on natural gas, associated petroleum gas etc.

**LUKOIL EFFORSE 4004** is formulated from high quality mineral base stocks and superior performance additive technology.

**LUKOIL EFFORSE 4004** is specially developed in accordance with requirements of the world leading gas engines manufactures such as GE Jenbacher (Type 4, 6, 2 and 3 engines), Perkins, Rolls Royce, Caterpillar, Deutz and others. Gas

engines running under severe conditions promote oxidation and nitration of the lubricant. **LUKOIL EFFORSE 4004** contains advanced additive technologies designed to deliver complete protection against harmful deposit formation, engine wear, scuffing, oil oxidation and nitration, in high output natural gas engines. This highly robust lubricant offers a very long service period, and maximizes engine life.

## APPLICATION

**LUKOIL EFFORSE 4004** is recommended for naturally aspirated and turbocharged gas engines in stationary applications running on sweet or dry natural gas, associated petroleum gas etc.

The product name in an order:

Gas engine oil LUKOIL EFFORSE 4004, STO 79345251-021-2011

## TYPICAL TEST DATA

PROPERTY	Test methods	LUKOIL EFFORSE 4004
Density at 15 °C, kg/m <sup>3</sup>	ASTM D1298 / ASTM D4052	888
Kinematic viscosity at 100 °C, mm <sup>2</sup> /s	ASTM D445	14.3
Kinematic viscosity at 40 °C, mm <sup>2</sup> /s	ASTM D445	148.4
Viscosity index	ASTM D2270	99
Total Base Number, mg KOH/1 g oil	ASTM D2896	5.6
Sulphated ash, %	ASTM D874	0.46
Flash Point, COC, °C	ISO 2592	270
Pour Point, °C	GOST 20287 B	-28

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"