



PRODUCT DATA SHEET

EKO FORZA FUEL ECONOMY 5W-30 E6/E9

Lubricant for commercial vehicle engines

DESCRIPTION

EKO FORZA FUEL ECONOMY 5W-30 E6/E9 is a 100% synthetic lubricant of the latest generation with a low level of SAPS (Low SAPS), specially designed for the latest diesel engines of heavy-duty vehicles meeting the EURO VI emission standards for on-road vehicles and EU Stage IV emission standards for off-road vehicles.

EKO FORZA FUEL ECONOMY 5W-30 E6/E9 is suitable for EURO I to EURO VI diesel engines. The use of the lubricant in older diesel engines helps improve performance and extend oil change intervals.

EKO FORZA FUEL ECONOMY 5W-30 E6/E9 is suitable for diesel engines with or without diesel particulate filters (DPF), EGR diesel engines and diesel engines with SCR systems.

EKO FORZA FUEL ECONOMY 5W-30 E6/E9 meets ACEA E6, ACEA E7, ACEA E8, ACEA E9, ACEA E11 and API CK-4 standards and holds approvals from major manufacturers (OEM) such as DAIMLER TRUCK, MAN, MACK, RENAULT and VOLVO.

The SAE 5W-30 viscosity grade and the modern technology of the lubricant provide significant fuel savings (1.19 % fuel economy in the Daimler OM501 Fuel Eco test).

The 100% synthetic formulation of EKO FORZA FUEL ECONOMY 5W-30 E6/E9 provides excellent protection and cleanliness to the engine, thus maximizing engine performance and lifespan.

The excellent anti-oxidation properties of lubricant EKO FORZA FUEL ECONOMY 5W-30 E6/E9 contribute to the increase of the oil lifespan. The low volatility loss of the lubricant and the high resistance to shear provide excellent control of lubricant consumption.

The final benefit is the reduction of maintenance costs and operating costs.



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SPECIFICATIONS

ACEA E6, E7, E8, E9, E11, API CK-4/SN, CATERPILLAR ECF-3, CUMMINS CES 20086, DAF PSQL 2.1E-LD, DETROIT DIESEL DDC 93K222, DEUTZ DQC IV-18 LA, DTFR 15C100 (228.31), DTFR 15C120 (228.52), FORD WSS-M2C213-A1, JASO DH-2, MTU Type 3.1, SCANIA LDF-4, SCANIA LA. Meets the requirements of MAN M 3477.

APPROVALS

DTFR 15C110 (228.51), MAN M 3677, MAN M 3691, MAN M 3775, VOLVO VDS-4.5, MACK EOS-4.5, RENAULT VI RLD-3.

Suitable for use: API CJ-4, API CI-4 plus, API CI-4, API CH-4, CUMMINS CES 20081, DETROIT DIESEL DDC 93K218, MACK EO-O Premium Plus, VOLVO CNG, VOLVO VDS-4.

APPLICATIONS

- It is suitable for heavy-duty diesel engines that meet the emission requirements EURO I to EURO VI.
- It is suitable for mixed fleets of vehicles of various manufacturers and ages.
- Applications include on-road transport vehicles operating at high speeds and high loads, and off-road vehicles and equipment operating at low speeds and high loads in applications in construction, mining, shipping and agriculture.

ADVANTAGES

EKO FORZA FUEL ECONOMY 5W-30 E6/E9 provides excellent wear protection and excellent oxidation resistance, as demonstrated by the results in critical tests of API CK-4, DTFR 15C110 (228.51) and Volvo VDS-4.5 specifications:

- Provides 68% less wear of camshaft outlet in the OM646LA Cam Wear Outlet test, compared to the DTFR 15C110 (228.51) limit.
- Provides 61% less wear of camshaft inlet in the OM646LA Cam Wear Inlet test, compared to the DTFR 15C110 (228.51) limit.
- Provides 60% less wear of cylinder in the OM646LA Cylinder Wear test, compared to the DTFR 15C110 (228.51) limit.



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ADVANTAGES

- Provides 96% less increase in lubricant viscosity due to oxidation in the Mack T-13 KV40 increase test, compared to the Volvo VDS-4.5 limit.
- In the Mack T-13 Oxidation peak height test, provides 60% better protection against oxidation compared to the API CK-4 limit and 40% better protection compared to the Volvo VDS-4.5.
- Provides 26% less lubricant consumption in the Mack T-13 Average oil consumption test, compared to the Volvo VDS-4.5 limit.
- Offers 1.19 % fuel economy in the Daimler OM501 Fuel Eco test.

TYPICAL CHARACTERISTICS

Properties	Methods	Units	EKO FORZA FUEL ECONOMY 5W-30 E6/E9
SAE Viscosity Grade	-	-	5W-30
Density, 15°C	ASTM D4052	g/ml	0.857
Kinematic Viscosity, 100°C	ASTM D445	cSt	11.8
Kinematic Viscosity, 40°C	ASTM D445	cSt	71.1
Viscosity Index (VI)	ASTM D2270	-	162
CCS Viscosity, -30°C	ASTM D5293	cP	6020
Base Number, TBN	ASTM D2896	mg KOH/g	10.1
Sulfated Ash	ASTM D874	% w/w	1.0
Pour Point	ASTM D5950	°C	-42
Flash Point, COC	ASTM D92	°C	228

HEALTH AND SAFETY

Protect the environment while disposing of used product. Used lubricants should be collected at specific points to ensure they do not pollute the environment. Do not mix with solvents, brake fluids, antifreeze fluids and water, to allow for proper handling.

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This data sheet provides basic information on the product as at the date of drafting. For further information regarding applications, please contact EKO ABEE Technical Support, tel. +30 210 5509 511.
Advice on safe handling is provided in the Safety Data Sheet.