

Product Data sheet

# **EKO MARINE PREMIUM 15W-40**

# Lubricant for marine 4-stroke diesel engines

## Description

EKO MARINE PREMIUM 15W-40 is an extra high performance multigrade heavy-duty diesel engine oil, suitable for almost all high-speed four-stroke marine diesel engines operating on coastal shipping, fishing, leisure boats and other applications.

It is suitable for modern low-emission marine diesel engines-including engines equipped with exhaust reduction systems such as EGR and SCR systems, but also for older engines.

The formulation of EKO MARINE PREMIUM 15W-40 improves the reliability and the lifespan of the engine and contributes to reducing maintenance costs and fuel costs.

It meets the performance requirements of the major diesel engines manufacturers, including MTU, VOLVO, MAN, CUMMINS, CATERPILLAR, MACK, IVECO, YANMAR, BAUDOUIN, DEUTZ, PERKINS and DETROIT DIESEL.

## **Applications**

- High-speed propulsion engines, naturally aspirated or turbocharged, operating on coastal vessels, fishing boats, lifeboats and leisure boats.
- High-speed engine generators.
- Transmission systems and auxiliary units, according to manufacturer's recommendations.

# **Specifications**

ACEA E7, API CI-4/CH-4/SL/SJ, CAT ECF-2, CAT ECF-1a, CUMMINS CES 20076/20077/20078, DDC 93K215, DEUTZ DQC III-10, DTFR 15B110 (228.3), GLOBAL DHD-1, JASO DH-1, MACK EO-M PLUS/ EO-M, MAN M3275-1.

#### Approvals

MTU Type 2, VOLVO VDS-3, MACK EO-N, RENAULT RLD-2.

#### **Advantages**

- Excellent protection against wear: increases the lifespan of all critical engine components.
- Excellent water resistance: helps maintaining a strong lubricating film in the presence of seawater.
- Excellent control of deposits: increases cleanliness and reliability of the engine and reduces lubricant consumption.
- Excellent resistance to thermal degradation: provides lasting protection of the engine at extended oil-drain intervals, even under the most severe operating conditions.
- High TBN value and excellent retention of TBN value: protects all engine components against corrosive wear at extended lubricant-operation intervals.
- High shear stability and high viscosity index: help maintaining a strong lubricating film at all operating temperatures.
- Excellent performance at low temperatures: provide excellent control of wear at the start of the engine.

# **Typical Characteristics**

Properties	Methods	Units	EKO MARINE PREMIUM 15W-40
SAE Viscosity Grade	-	-	15W-40
Density, 15°C	ASTM D4052	g/ml	0.885
Kinematic Viscosity, 100°C	ASTM D445	cSt	14.5
Kinematic Viscosity, 40°C	ASTM D445	cSt	106.8
Viscosity Index (VI)	ASTM D2270	-	140
CCS Viscosity, -20°C	ASTM D5293	cP	6400
Base Number, TBN	ASTM D2896	mg KOH/g	11.5
Sulfated Ash	ASTM D874	% w/w	1.3
Pour Point	ASTM D5950	°C	-36
Flash Point, COC	ASTM D92	°C	230

#### 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.