



## Mobilgard™ 540 X

ExxonMobil Marine , Kenya

High Performance Marine Diesel Engine Cylinder Oil

### Product Description

Mobilgard™ 540 X by ExxonMobil is a premium quality, high-performance marine diesel engine cylinder oil designed to effectively lubricate across wide-ranging fuel applications. The performance of Mobilgard 540 X has been demonstrated at the elevated peak firing pressures and liner temperatures found in modern marine two stroke engines, across Residual Fuel Oil, Distillate and Liquefied Natural Gas (LNG) use.

Through the use of advanced formulation and detergency technologies in conjunction with a low Base Number (BN), Mobilgard 540 X has demonstrated the ability to optimise cylinder oil feed-rates whilst effectively managing acid neutralisation and deposit formulation in a range of engine types and fuel applications.

Mobilgard 540 X possesses low volatility to ensure excellent lubricant distribution and oil film retention whilst operating at reduced cylinder oil feed rates.

### Features and Benefits

Mobilgard 540 X combines the use of high-quality, globally consistent base stocks with a superb additive formulation to provide exceptional deposit control due to increased temperatures and pressures within combustion cylinders, which are particularly prevalent in LNG fuel operation. Mobilgard 540 X also offers outstanding resistance to oxidation, acid formulation and wear protection which can lead to reduced component wear rates.

### Applications

Mobilgard 540 X is formulated to provide outstanding performance in marine crosshead engines operating on a wide variety of fuel applications, including continuous LNG use.

### Properties and Specifications

Property	
Grade	SAE 50
Density @ 15.6 C, kg/m <sup>3</sup> , ASTM D4052	930.1
Pour Point, °C, ASTM D97	-27
Flash Point, Cleveland Open Cup, °C, ASTM D92	268
Total Base Number, mgKOH/g, ASTM D2896	40
Viscosity Index, ASTM D2270	102
Kinematic Viscosity @ 40 C, mm <sup>2</sup> /s, ASTM D445	232
Kinematic Viscosity @ 100 C, mm <sup>2</sup> /s, ASTM D445	20

### Health and safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ <http://www.msds.exxonmobil.com/psims/psims.aspx>

All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries unless indicated otherwise.

12-2025

16.04.2026

ExxonMobil Marine Limited  
Ermyn Way  
Leatherhead, Surrey  
United Kingdom KT22 8UX

<http://www.exxonmobil.com>

Due to continual product research and development, the information contained herein is subject to change without notification. Typical Properties may vary slightly.

**ExxonMobil**

© Copyright 2003-2026 Exxon Mobil Corporation. All  
Rights Reserved