ExxonMobil

Mobilgard™ M50

ExxonMobil Marine , Croatia

Diesel Engine Oil

Product Description

Mobilgard M50 by ExxonMobil are premium, extra high performance 50 TBN engine oils designed for use in the most severe residual-fuelled medium-speed diesel applications found in marine and stationary power industries. These market leading trunk piston engine oils are formulated utilizing the latest in additive detergent technology and provide outstanding residual fuel compatibility characteristics for excellent engine cleanliness, especially in crankcase, camshaft areas, ring belt and piston undercrowns. They also demonstrate excellent high temperature oxidation and thermal stability, low volatility, and high load carrying properties and corrosion protection.

Features and Benefits

Mobilgard M50 has industry-leading thermal and oxidation stability. It has excellent TBN retention and resistance to viscosity increases over long operating periods. It also promotes a high level of engine cleanliness with protection against wear. Compared to other medium speed engine oils, it has superior lube/fuel compatibility and separates easily from water.

When used as recommended, Mobilgard M50 diesel engine oil provides the following benefits:

Features	Advantages and Potential Benefits
Excellent thermal and oxidation stability	Reduced deposits in piston undercrown and ring belt areas
Improved anti-wear properties	Extends the life of critical wear surfaces
Advanced detergency/dispersancy	Clean camshaft and crankcase spaces
Outstanding rust and corrosion properties	Protects wear surfaces from water and acidic corrosion
High Residual Fuel Compatibility	Reduced sludge formation, longer oil life, cleaner engines
Low volatility base stocks	Reduced lubricant consumption
Excellent TBN Reserve and Retention	Combats fuel/combustion related corrosion and deposits

Applications

Mobilgard M50 oil can be used in most medium-speed trunk piston engine applications. It is recommended for use in main propulsion and auxiliary engines on deep-sea vessels; in main propulsion engines on coastal and river ships; and in stationary power plants. This new oil is the result of an extensive research and development program, incorporating ExxonMobil's patented DAC (Detecting Aspahltene Contamination) Test.

Mobilgard M50 oil is designed to meet the needs of engines operating on heavy fuel. It is recommended for use in the latest model medium speed diesel engines and is especially beneficial in engines having low crankcase oil consumption or operating with low cylinder liner temperatures. In these engines, oil life and drain intervals have been significantly reduced when using conventional lube oils due to severe TBN depletion resulting from very low lube oil consumption. Relatively high alkalinity reserves in this oil provide superior protection in neutralising the strong acids resulting from the use of high sulphur fuels that find access to the crankcase to promote oil degradation and ring, cylinder, and bearing corrosion.

Mobilgard M50 is also recommended for topping-up existing oil charges with a low TBN value to raise them to an acceptable value.

Properties and Specifications

Property	
Grade	SAE 40
Ash, Sulfated, wt%, ASTM D874	6.5
Flash Point, Cleveland Open Cup, °C, ASTM D92	228
Kinematic Viscosity @ 100 C, mm2/s, ASTM D445	14
Pour Point, °C, ASTM D97	-6
Specific Gravity, 15 C/15 C, ASTM D4052	0.922
Total Base Number, mgKOH/g, ASTM D2896	50

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.

03-2025
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.

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