

A full suite of four-stroke engine oils



Energy lives here™

ExxonMobil offers a range of advanced lubricants for medium-speed marine engines. These lubricants are formulated with advanced additive technology to help protect against wear and deposit formation, regardless of operating conditions or fuel type. Used in conjunction with Mobil Serv™ Lubricant Analysis, ExxonMobil's next-generation used oil analysis service, these lubricants can help vessel operators prolong engine life and reduce unscheduled maintenance and overall oil consumption.*

Engine oils at a glance

Engine oil	Applications	No Objection Letters
Mobilgard™ M20 Series	For use in medium-speed engines using 0.50% or 0.10% sulphur fuels and liquefied natural gas (LNG)	MAN ES Wärtsilä
Mobilgard™ M30 Series	For use in medium-speed engines in deep-sea, coastal and river vessels operating on residual fuel	MAN ES Wärtsilä Caterpillar
Mobilgard™ M40 Series	For use in severe, residual-fuelled, medium-speed diesel applications	MAN ES Wärtsilä Caterpillar
Mobilgard™ M50	For use in the most severe residual-fuelled, medium-speed diesel applications	MAN ES Wärtsilä Caterpillar
Mobilgard™ 12 Series	For use in marine trunk piston engines operating on low-sulphur distillate fuels	
Mobilgard™ ADL Series	For use in high Brake Mean Effective Pressure (BMEP) medium- and high-speed engines operating on distillate fuels	

*Compared to standard mineral oils.

Mobilgard™ M Series oils



Mobilgard™ M20 Series for low-sulphur fuels, liquefied natural gas and heavy fuel oil

Mobilgard M20 Series is for use in medium-speed engines using 0.10% and 0.50% sulphur fuels, including residual grades, liquefied natural gas (LNG) and heavy fuel oil (HFO). Its 20 BN formulation helps ensure that vessels with dual-fuel engines can continue using a single lubricant, regardless of their fuel selection.



Mobilgard™ M30 Series for heavy fuel oil

Mobilgard M30 Series is recommended for use in medium-speed engines in deep-sea, coastal and river vessels operating on heavy fuel oil (HFO). These extra-high-performance trunk piston engine oils are formulated using advanced additive detergent technology to help protect against deposit and sludge formation.

Potential benefits

Mobilgard M20 Series and M30 Series oils can help:

	Mobilgard M20 Series	Mobilgard M30 Series
Protect against deposit formation	✓	✓
Extend the life of critical wear surfaces	✓	✓
Minimise lubricant consumption	✓	✓
Reduce maintenance and operational costs	✓	✓
Optimise component life		✓

Mobilgard™ M Series oils



Mobilgard™ M40 Series for residual fuels

Mobilgard M40 Series extra-high-performance, premium 40 BN oils are designed for use in severe, residual-fuelled, medium-speed diesel applications and are formulated using advanced additive detergent technology.



Mobilgard™ M50 for severe residual fuels

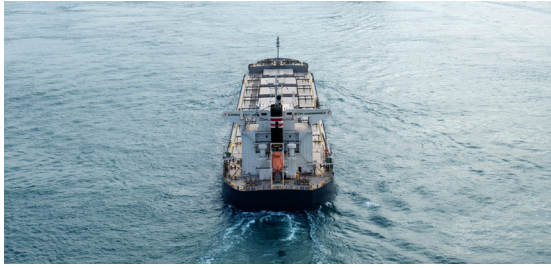
Mobilgard M50 is a high-performance 50 BN oil for use in the most severe residual fuel, medium-speed diesel applications and is formulated using advanced additive detergent technology.

Potential benefits

Mobilgard M40 Series and M50 Series oils can help:

	Mobilgard M40 Series	Mobilgard M50 Series
Reduce deposit and sludge formation	✓	✓
Protect wear surfaces from water and acidic corrosion	✓	✓
Reduce lubricant consumption	✓	✓
Combat fuel- and combustion-related corrosion and deposits	✓	✓

Mobilgard™ 12 Series and Mobilgard™ ADL Series



Mobilgard™ 12 Series for low-sulphur distillate fuels

Mobilgard 12 Series is designed for use in marine trunk piston engines operating on low-sulphur distillate fuels. Mobilgard™ 312, Mobilgard™ 412 and Mobilgard™ 512 diesel engine oils are particularly effective in small bore, high-speed engines and new, severe service engines, as well as many types of medium-speed engines.



Mobilgard™ ADL Series for distillate fuels

Mobilgard ADL Series is designed for high Brake Mean Effective Pressure (BMEP) in medium- and high-speed diesel engines operating on distillate fuels. Mobilgard™ ADL 30 and Mobilgard™ ADL 40 oils are formulated to combat lacquer formation and deposits in severe service applications.

Potential benefits

Mobilgard 12 Series and Mobilgard ADL Series oils can help:

	Mobilgard 12 Series	Mobilgard ADL Series
Extend periods between engine overhauls	✓	✓
Reduce ring and liner wear	✓	
Increase protection against corrosive wear	✓	
Extend component and critical wear surface life		✓
Improve overall engine cleanliness	✓	✓
Increase oil service life	✓	
Reduce oil consumption		✓

Mobil Serv™ Lubricant Analysis

To maximise the potential benefits of its medium-speed offer, ExxonMobil recommends vessel operators implement Mobil Serv Lubricant Analysis, which can deliver actionable insights within moments of testing. Onboard engineers can rapidly react to the findings, taking steps to help reduce costly component damage and downtime, optimising lubricant usage in the process. Mobil Serv Lubricant Analysis for four-stroke engines includes the company's patented DAC test, which checks lubricant samples for asphaltene contamination. Left undetected, this could lead to piston damage, avoidable repairs and excessive oil consumption.



Mobil Serv™
Lubricant Analysis