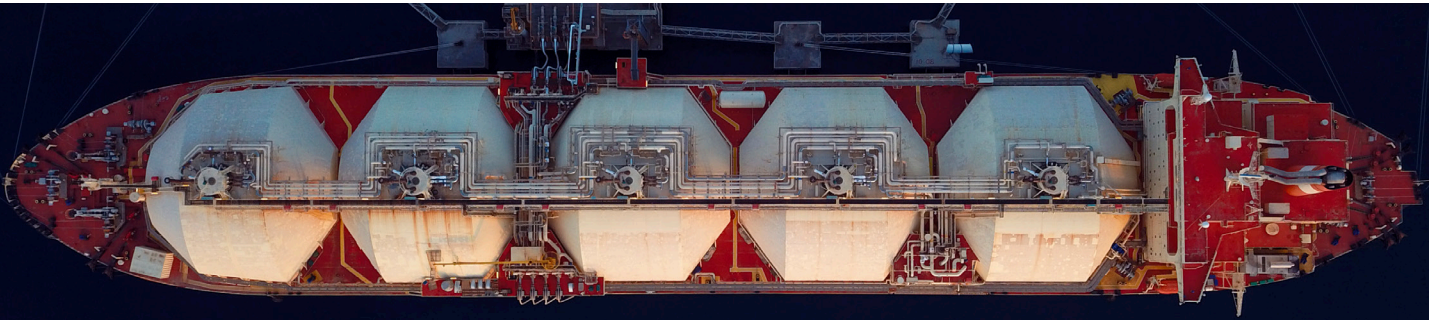


Mobilgard™ 540 AC

A marine diesel engine cylinder oil approved by both WinGD and MAN Energy Solutions



Potential benefits

Mobilgard 540 AC cylinder oil helps³:

1. Prolong engine life
2. Minimise maintenance
3. Enhance vessel reliability
4. Simplify operations

Product features

Mobilgard™ 540 AC, an advanced 40BN cylinder oil, is developed for use in slow-speed, two-stroke marine engines operating on fuels with up to 1.50% sulphur content, LNG, ethane, methanol and LPG¹. This high-performance lubricant has been LNG validated² by WinGD for use in its dual fuel engines with conventional fuels, including methanol. It also holds Category II status from MAN ES for use in its two stroke engines, including dual fuel variants.

The cylinder oil has been engineered using ExxonMobil's balanced formulation approach. It has also passed stringent fit-for-use assessments. It can help:

- Deliver exceptional cleanliness due to high level of detergency
- Combat deposits and scuffing-related engine wear associated with low-sulphur fuels
- Ensure performance even in severe operating conditions as a result of excellent thermal and oxidative stability

Established performance

Mobilgard 540 AC is part of the MobilGard™ range of high-performance cylinder oils. It was formulated to meet the specific needs of slow-speed, two-stroke marine engines operating on fuels with up to 0.50% sulphur content (including ExxonMobil's EMF.5™ range) including LNG and methanol. It is backed up by more than 60 years of engineering excellence and lubrication technology.

The cylinder oil is suitable for use in all MAN ES and WinGD two-stroke engines across LNG, distillate, methanol and very low sulphur fuel oils (VLSFOs).

Maximise cost savings

Mobil™ Cylinder Condition Monitoring, used in conjunction with Mobilgard 540 AC, can help vessel operators optimise cylinder oil feed rates while also improving engine protection. The next-generation onboard scrape down oil analysis service can spot issues before they become problems, which can help achieve significant cost savings.

Mobilgard 540 AC has been approved by both **WinGD** and **MAN ES**

Mobilgard™ 540 AC

Marine engine builder	No Objection Letter
WinGD	✓
MAN ES (Category II)	✓

Typical properties

SAE Grade	50
Specific Gravity at 15°C	0.904
Flash Point, °C, ASTM D 93	207
Pour Point, °C, ASTM D 97	-30
cSt, at 40°C	218
cSt, at 100°C	19
Viscosity Index, ASTM D 2270	99
TBN, mg KOH/g, ASTM D 2896	40

¹ Please refer to OEM guidelines.

² LNG validated has been introduced by WinGD as the renewed claim language for dual fuel validation (April 2024).

³ When compared with a standard 40 BN cylinder oil and no/limited scrape down oil analysis.