Performance by **ExconMobil**

Mobilgard™ HSD+ 15W-40

High-performance, heavy-duty diesel engine oil offering advanced protection



Energy lives here

Product features

Mobilgard" HSD+ 15W-40 is an advanced, multigrade diesel engine oil that can help extend engine life and is formulated for severe-service, high-speed diesel engines in marine applications. It can offer:

- Outstanding oxidation stability
- Excellent soot and viscosity control
- Component compatibility
- Low-ash (low SAPS*) formulation, meeting API CK-4 requirements

Performance up to **50%** beyond OEMrecommended ODIs[†] Potential benefits

Mobilgard HSD+ 15W-40 engine oil can help:

- Extend oil drain interval (ODI) capability[†]
- 2 Reduce low-temperature sludge buildup and high-temperature deposits
- Provide greater engine efficiency, long engine life and long oil life
- **4** Protect life of exhaust after-treatment systems (DPF, DOC and SCR)

Engine recommendations

Fully backward compatible, Mobilgard HSD+ 15W-40 oil delivers exceptional performance in both newer and older heavy-duty engine designs. Accordingly, the oil meets or exceeds the requirements of API CK-4, Caterpillar ECF-3, and Cummins CES 20086 and 20081. Mobilgard HSD+ 15W-40 oil has secured the following OEM approvals: MAN M 3575, MAN M3275-1 and Volvo VDS-4.5.

Recommended applications	
The latest heavy-duty engines, including those equipped with aftertreatment systems and EGR	\checkmark
The most severe-service marine applications of modern, high- speed diesel engines	\checkmark

*Sulphated Ash, Phosphorus and Sulphur

¹Results may vary based on vessel/engine condition, load and environmental conditions. Consult OEM or ExxonMobil before implementing extended ODIs.

Mobilgard™ HSD+ 15W-40

Product formulation

Mobilgard" HSD+ 15W-40 engine oil is formulated with optimised base oil technology, containing severely hydro-processed base stocks and a tailored additive system to deliver extended performance and oil drain intervals. This proprietary formulation delivers excellent wear protection, and outstanding oxidation stability and TBN retention.

Potential advantages

Mobilgard HSD+ 15W-40 oil also provides outstanding resistance to oil consumption, oxidation, corrosive and abrasive wear, and hightemperature deposits. The oil delivers excellent wear and engine protection, extended drain capability, outstanding high-temperature performance and engine cleanliness.

Engine protection

Developed in close collaboration with major OEMs, Mobilgard HSD+ 15W-40 oil is recommended for use in a wide range of heavy-duty applications and in the most severe marine environments. This product provides outstanding protection in the most demanding diesel engines.

Meets requirements of or approved by		
Caterpillar	\checkmark	
Cummins	\checkmark	
Detroit	\checkmark	
Mercedes Benz	\checkmark	
MAN	\checkmark	
Volvo	\checkmark	



Typical properties

Mobilgard HSD+	
SAE Grade	15W-40
Viscosity, ASTM D 445	
cSt @ 40°C	109
cSt @ 100°C	14.1
Viscosity Index, ASTM D 2270	130
Density @ 15°C kg/L, ASTM D 4052	0.874
Pour Point, °C, ASTM D 97	-33
Flash Point, °C, ASTM D 92	225
Sulphated Ash, wt%, ASTM D 874	0.9
Total Base Number, mg KOH/g, ASTM D 2896	9.8

exxonmobil.com/marine