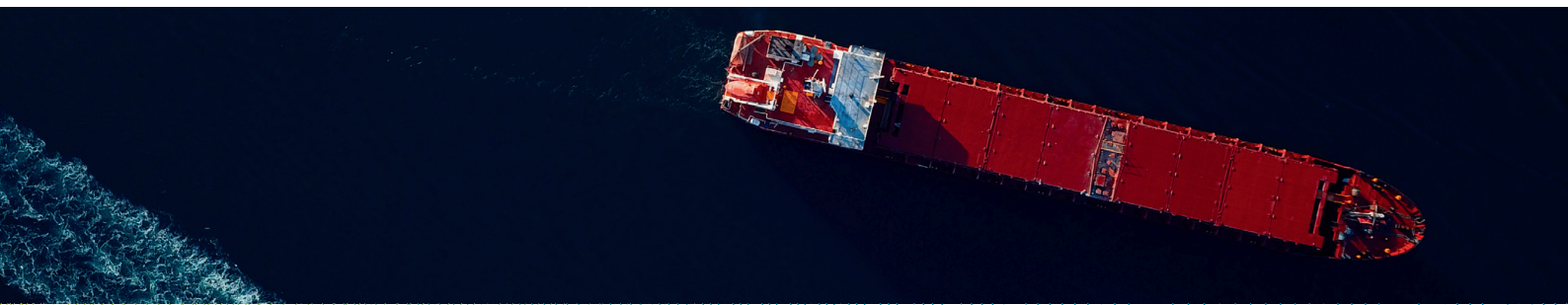


Mobilgard™ 1 HSD

Unique, synthetic lubricant formulated for high-speed diesel engines



Energy lives here™

Product features

Mobilgard™ 1 HSD advanced synthetic diesel engine oil uses a unique ExxonMobil formulation with balanced additive technology, suitable for a range of marine applications. It can offer:

- Enhanced equipment reliability
- Exceptional protection against deposits and sludge buildup
- Excellent soot-handling capabilities
- High-temperature stability and low-temperature characteristics (cold starts)

Potential benefits

Mobilgard 1 HSD oil can help reduce operating costs by:†

- 1 Extending drain and service intervals
- 2 Reducing oil consumption and waste oil disposal
- 3 Helping prolong engine life
- 4 Potentially helping fuel economy

Engine recommendations

This oil is recommended for low-emission engines, including those with Exhaust Gas Recirculation (EGR) and after-treatment systems with Diesel Particulate Filters (DPFs) and Diesel Oxidation Catalysts (DOCs). It is designed to protect engines operating in both high- and low-speed/high-load conditions.

Even in demanding conditions, Mobilgard 1 HSD oil provides cutting-edge performance to meet and exceed an extensive range of OEM and industry specifications, including Cummins CES 20081 and Caterpillar ECF-3. It also meets and exceeds the requirements of API CK-4.



Recommended applications	
Main engines	✓
Generator engines	✓
Lifeboat engines	✓

*Based on the experience of a single customer. Actual results can vary depending upon the type of equipment used and its maintenance, operating conditions and environment, and any prior lubricant used.

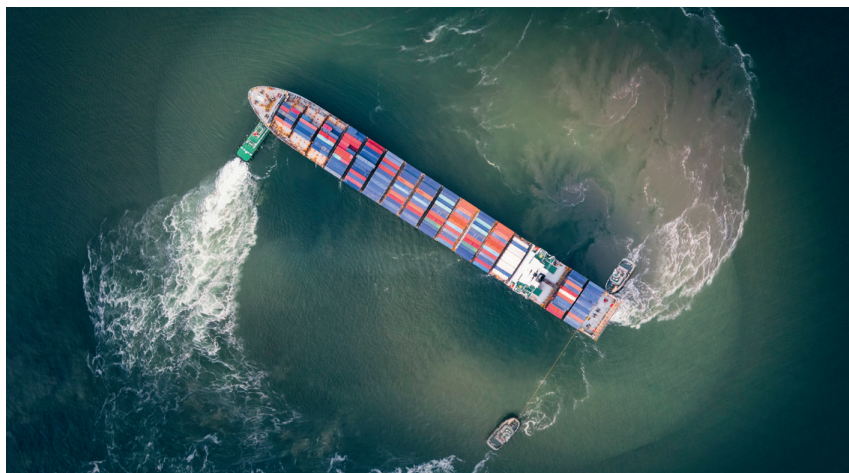
†Compared to conventional, mineral 15W-40 products.

Mobilgard™ 1 HSD

Reliable performance under extreme conditions

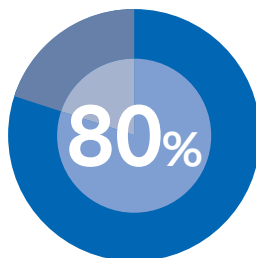
Mobilgard™ 1 HSD fully synthetic diesel engine oil provides excellent performance under the most severe operating conditions. It offers:*

- Exceptional protection against soot-related viscosity increase, helping extend component life
- Outstanding wear protection, helping reduce engine scuffing and bore polishing
- High performance at significantly higher temperatures than other diesel engine oils



Clean engines

Outstanding thermal and oxidation stability helps to reduce low-temperature sludge buildup and high-temperature deposits. This offers vessel operators the potential for cleaner engines, longer component life and longer drain intervals compared with mineral-based alternatives.



Mobilgard 1 HSD oil helped AEP River Operations **cut engine oil usage and waste oil disposal by an average of 80 per cent.**[†]

Long service life

Mobilgard 1 HSD oil is engineered to enhance equipment reliability, helping maximise component life and lower operational and maintenance costs compared to conventional oils. Additionally, it helps reduce oil consumption, provide improved fuel economy, reduce waste oil disposal and lower overall operating and maintenance costs.

Typical properties

Mobilgard 1 HSD	
SAE Grade	5W-40
Viscosity, ASTM D 445	
cSt @ 40°C	83.9
cSt @ 100°C	13.9
Viscosity Index, ASTM D 2270	Min. 150
Sulphated Ash, wt%, ASTM D 874	1.0
Total Base #, mg KOH/g, ASTM D 2896	12.1
Pour Point, °C, ASTM D 97	-33
Flash Point, °C, ASTM D 92	222
Density @ 15°C kg/l, ASTM D 4052	0.857

*Compared to conventional, mineral 15W-40 products.

[†]Based on the experience of a single customer. Actual results can vary depending upon the type of equipment used and its maintenance, operating conditions and environment, and any prior lubricant used.