# **E‰onMobi**l

# Mobilgard<sup>™</sup> HSD 15W-40

ExxonMobil Marine , Mozambique

### Product Description

Mobilgard HSD 15W-40 by Mobil is an extra high performance, multi-grade engine oil specifically formulated for severe service high-speed diesel engines in r applications. Its advanced chemistry provides outstanding performance in both modern, demanding low-emission diesel engines and older diesel engines operat low or high sulphur distillate fuel. Mobilgard HSD 15W-40 is approved or recommended by all the major marine high-speed diesel engine builders.

#### Features and Benefits

Mobilgard HSD 15W-40 combines a blend of high quality base stocks with a superior balanced additive system to provide exceptional control of oil thickening soot build-up and high temperatures, as well as outstanding resistance to oxidation, corrosion, and high temperature varnish deposits.

When used as recommended, Mobilgard HSD 15W-40 diesel engine oil provides the following features and potential benefits:

| Features  | Advantages and Potential Benefits  |  |
|---|--|--|
| Outstanding thermal and oxidation stability         | Reduces formation of deposits and sludge build-up<br>Keeps engines clean and operating smoothly              |  |
| Excellent wear protection                           | Extended life of critical engine components  |  |
| High Viscosity Index                                | Stable oil film at all operating temperatures<br>Reduced oil consumption                                     |  |
| Increased high temp/high shear performance          | Reduced engine scuffing, bore polishing and ring sticking  |  |
| Outstanding TBN retention                           | Protects engine parts from corrosive wear and deposits   |  |
| Excellent water tolerance and separation capability | Maintains effective lubrication and film-strength in the presence of water                                   |  |
| Excellent low temperature properties                | Improved oil pumpability/circulation at start-up<br>Start-up wear protection especially for valve train area |  |

#### Applications

Mobilgard HSD 15W-40 is designed to provide outstanding performance in the most severe service marine applications of modern high-speed diesel engines, s Caterpillar 3500 Series and smaller bore, Cummins, Volvo, Daihatsu, Yanmar, and others.

#### Specifications and Approvals

| This product has the following approvals: |
|---|
| MB-Approval 228.3                         |
| VOLVO VDS-3                               |
|   |

This product is recommended for use in applications requiring:

API CF

| This product is recommended for use in applications requiring: |
|--|
| API CF-4   |
| API CG-4   |
| MAN M 3275-1   |
| Cummins CES 20071  |
| Cummins CES 20072  |
| Detroit 7SE 270 (4-STROKE CYCLE)                               |

| This product meets or exceeds the requirements of: |
|--|
| API CH-4   |
| API CI-4   |
| API SJ   |
| API SL   |
| Cummins CES 20076                                  |
| Cummins CES 20077                                  |
| ACEA E7  |
| CATERPILLAR ECF-2                                  |

## Properties and Specifications

| Property                                      |            |
|---|------------|
| Grade   | SAE 15W-40 |
| Ash, Sulfated, mass%, ASTM D874               | 1.1        |
| Flash Point, °C, ASTM D92                     | 227        |
| Kinematic Viscosity @ 100 C, mm2/s, ASTM D445 | 14.2       |
| Kinematic Viscosity @ 40 C, mm2/s, ASTM D445  | 105        |
| Pour Point, °C, ASTM D97                      | -33        |
| Specific Gravity, 15 C/15 C, ASTM D4052       | 0.881      |
| Total Base Number, mgKOH/g, ASTM D2896        | 10         |
| Viscosity Index, ASTM D2270                   | 138        |

## 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.as

# Mobilgard™ HSD 15W-40

All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries unless indicated otherwise.

07-2021 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

