# E**∦onMobi**l

Mobilgard 410 NC Exxonmobil Marine, United States

Marine Crankcase Oil

## **Product Description**

Mobilgard 410 NC (No Chlorine) engine oil is a non-zinc and non-chlorine lubricant specifically formulated with an Electro Motive Diesel (EMD) and General Electric (GE) endorsed additive technology to meet requirements of heavily loaded diesel engines manufactured by EMD and used in marine applications. Its alkalinity reserve provides excellent corrosion protection when using fuels containing up to 0.05 wt.% sulfur, even though metals such as steel, copper, silver and bronze are present. It has excellent lubricating properties and has high viscosity index to help reduce oil consumption, and is optimized for low and ultra low sulfur fuel use and is LNG, biofuel and Tier IV engine ready.

### Features and Benefits

- Formulated to meet performance requirements of Tier IV engines
- High thermal and oxidation stability helps protect against sludge formation in intermittent marine service, providing clean, smooth running engines
- Effective anti-wear and load carrying properties help protect critical wear surfaces and extend engine life
- Optimized TBN and sulfated ash content for use with low and ultra low sulfur diesel fuel and is biofuel and LNG ready
- Advanced dispersant technology provides high soot loading capability leads to excellent cleanliness in engines with lower lube oil consumption rates
- Excellent TBN reserve and retention to combat fuel/combustion related corrosion and deposits

### Applications

- Heavily loaded diesel engines manufactured by EMD/GE and used in marine applications
- Marine diesel engines of the highest horsepower, or higher brake mean effective pressure (BMEP) using distillate fuels with a sulfur content up to 0.05 wt.%
- Diesel engines manufactured by Alco, Detroit Diesel and Fairbanks Morse

# **Typical Properties**

SAE Grade	40
Viscosity, ASTM D 445	

cSt, at 40°C	141
cSt, at 100°C	14.4
Viscosity Index, ASTM D 2270	104
Sulphated Ash, wt%, ASTM D 874	1.0
Total Base Number, mg KOH/g, ASTM D2896	10.0
Pour Point, °C, ASTM D 97	-18
Flash Point, °C, ASTM D 92	255
Density @ 15°C kg/l, ASTM D 4052	0.894
Zinc, ppm, max	10
Chlorine, ppm, max	50

#### Health and Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

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