

Marine lubricants.

Sea 15W-40



Product developed for application in high-performance four-stroke diesel engines in marine applications, operating under severe conditions of high speed and high effective average pressure.

> Use

- Product developed for its application in high-performance diesel engines, both naturally aspirated and turbocharged, operating under severe conditions of high-speed and effective average pressure.
- The Sea 15W-40 product is manufactured with highly refined base oils, which give high resistance to oxidation and degradation, as well as providing stable viscosity at high temperatures and low volatility, thereby decreasing lubricant consumption. Excellent detergent/dispersant capacity, avoiding ring grip, and valve and piston deposits.
- Recommended for engines that operate with diesel of up to 0.5% sulfur and which are not equipped with gas post-treatment systems.

> Benefits

- High level of anti-wear protection, higher than other equivalent lubricants on the market.
- Excellent demulsibility and resistance to corrosion and rust.
- It contains high-efficiency dispersant additives, which extends the useful life of oil filters and allows them to remove abrasive materials present in the lubricant, avoiding any wear on the engine.

> Specifications

- API CI-4
- ACEA E7
- MAN 3275-1
- DTFR 15B110 (MB 228.3)
- VOLVO VDS-3
- MACK EO-N
- CUMMINS CES 20078
- CATERPILLAR ECF-2

> Physical and chemical properties

Parameter	Units	Method	Sea 15W-40
SAE Grade	-	-	15W-40
Density 15°C	kg/l	D-4052	0.887
Flash point COC	°C	D-92	>200
Pour point	°C	D-97	-42
Viscosity at 40 °C	cSt	D-445	99.11
Viscosity at 100° C	cSt	D-445	13.70
Viscosity Index	-	D-2270	130
Base Number, (min)	mg KOH/g	D-2896	11.0
Sulfated Ash	% p	D-874	1.46

> Health & safety and environment

A Material Safety Data Sheet providing information on product hazards, handling precautions, first aid measures, and relevant environmental data is available for this product as per applicable legislation.