

NEPTUNO S-TURBO MAR 15W40

MARINE LUBRICANTS

Description

Multigrade marine lubricant that exceeds traditional S.H.P.D. feature levels. Specially formulated to comply with the demanding needs of modern, turbo and revolution, four-stroke diesel engines in water, under the most severe working conditions, in fishing vessels, leisure boats, auxiliary port vessels and merchant ships.

Recommended uses

- In all turbo and high revolution diesel engines used for propulsion, like auxiliary and emergency groups to generate electricity and in those engines that require a high quality lubricant.
- Valid for engines that must comply with "EURO 3" and "EURO 4" standards, on low emission levels, and that use light fuel with up to 1% sulphur content.

Properties

- Avoids segment sticking by dispersing mud, varnishes and other high temperature oil oxidisation products.
- Contains efficient corrosion, oxidation, rust and foam formation inhibitors.
- Avoids cylinder liner polishing typical in over-fuelled, high power engines, with the consequent reduction of specific consumption.
- Excellent detergent capacity that reduces deposits in valves and pistons.
- Very good dispersing qualities that prevents the appearance of mud when cold.
- A highly stable alkaline reserve (TBN) gives great capacity to neutralise the acids formed in the fuel.
- Good cold-flow which facilitates ignition and reduces engine wear.
- Highly stable mutli-grade oil with excellent shear resistance.

Quality level

API CI-4 / CH-4 / SL.

• ACEA E7/E5.

• MTU Type 2

Meets Caterpillar ECF-1-a and ECF-2 standards

■ Technical characteristics

| | UNIT | METHOD | VALUE |
|---|-------------|-------------|--------------|
| SAE grade | | | 15W40 |
| Colour | | ASTM D 1500 | 5 |
| Density at 15°C | g/cm3 | ASTM D 4052 | 0.879 |
| Viscosity at 100°C | cSt | ASTM D 445 | 14.5 |
| Viscosity at 40°C | cSt | ASTM D 445 | 107 |
| Viscosity at –20 °C | cР | ASTM D 5293 | 7000 maximum |
| Viscosity rate | - | ASTM D 2270 | 141 |
| Flash point, open cup | °C | ASTM D 92 | 215 minimum |
| Pour point | °C | ASTM D 97 | -30 |
| TBN | mg KOH/g | ASTM D 2896 | 10 |
| Bosch Injector Shearing: Viscosity at 100°C after shear | cSt | ASTM D 3945 | 12.5 minimum |
| Noack volatility, 1hr at 250°C | % in weight | DIN 51581 | 12 maximum |

Available in

185 kg and 18 kg drums.

Hazard identification

This product is not classified as toxic or dangerous according to current European legislation.

Handling

Minimum precautions should be taken to avoid prolonged contact with the skin. The use of gloves, visors or glasses is recommended to avoid splashes.

■ Health and safety hazards

Inhalation: This product may have low volatility, the risk of inhalation is minimal.

Ingestion: Do not induce vomiting. Provide water. Seek medical advice.

Contact with the skin: Wash with plenty of water and soap.

Eyes: Wash with plenty of water.

General measures: Seek medical advice.

■ Firefighting measures

No special measures required.

Extinction: Foams, dry chemicals, CO₂, water spray. Do not apply a jet of water directly, as it could spread the product.

Environmental precautions

Danger of physical pollution if spilt (watercourses, coastlines, soil, etc.) due to its floatability and oily consistency that may harm flora and fauna on contact. Prevent the material from entering water outlets.

Decontamination and cleaning: Treat like an accidental oil spill. Prevent dispersion using mechanical barriers and remove by physical or chemical means.

A safety information file is available on request.

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Unless otherwise indicated, the figures cited in technical characteristics should be considered typical.