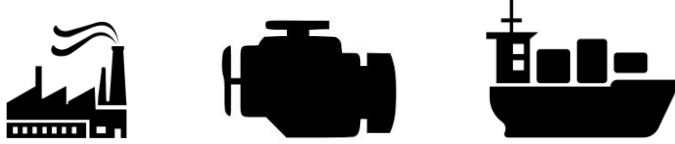


## **TPEO 5012**

**(Lubricants for medium-speed marine diesel engines)**



### **DESCRIPTION**

PATROL OIL TPEO 5012 is a high quality, multifunctional diesel engine lubricant which has been specially designed for the most severe service main propulsion and auxiliary marine trunk piston engines burning distillate, hybrid and bio-fuels with a sulphur content up to 1%, the newly formulated PATROL TPEO 5012 has also been optimized for use in non-engine applications which are typically found on board such as gearboxes, clutches and stern tubes.

### **APPLICATIONS**

- This is highly rated, medium speed, main propulsion & auxiliary trunk-piston stationary & marine diesel engines.
- PATROL TPEO 5012 will also perform satisfactorily in smaller high-speed engines typically used in fishing fleets which operate under arduous conditions and have small sump sizes.
- Turbochargers, oil filled stern tubes and variable pitch propellers.
- Deck machinery & other marine applications requiring SAE 50 viscosity oils.

### **PRODUCT FEATURES & BENEFITS**

- **EXTENDED OIL LIFE**

PATROL OIL TPEO 5012 offers excellent resistance to oxidation and thermal degradation so it can offer longer oil life, especially in high stress engines under severe operating conditions.

- **ENGINE PROTECTION**

PATROL OIL TPEO 5012 can help to extend engine life by reducing deposit formation in the piston ring belt and cylinder liners reducing the risk of ring sticking and breakage. In addition the new formulation has been designed to minimize lacquer formation resulting in greater control of oil consumption and reduced operating costs.

- **SYSTEM EFFICIENCY**

PATROL OIL TPEO 5012 has been designed to have greater tolerance to engine overload or poor combustion. It will also offer a greater safety margin to protect highly loaded bearings, in the event of water contamination.

### TYPICAL TECHNICAL PROPERTIES

SAE grade (viscosity class)	50
Density at 15°C, g/ml, ASTM D4052	0.890
Kinematic Viscosity at 40°C, mm <sup>2</sup> /s, ASTM D445	217.35
Kinematic Viscosity at 100°C, mm <sup>2</sup> /s, ASTM D445	19.8
Viscosity Index, ASTM D2270	105
Flash Point(COC), °C, ASTM D92	>230
Pour Point, °C, ASTM D97	-12
Total Base Number, mg KOH/g, ASTM D2896	12

**Note:** These characteristics are typically for current production. While future production will conform to PATROL's specification, variations in these characteristics may occur.

**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. This product should not be used for purposes other than its intended use. If disposing off used product, take care to protect the environment.

