



# MARINE NAUTILUS LS



## DESCRIPTION

NAUTILUS LS is a premium quality cylinder oil designed for two-stroke marine engines running on low sulphur heavy fuel oil (HFO). It consists of high quality mineral base oils and the latest in innovation additive system. It has been developed for heavy duty marine diesel engines operating under demanding conditions. It provides superior ring and liner protection against wear and excellent piston cleanliness, properties that enable the long life cycle of the powertrain.

## APPLICATIONS

NAUTILUS LS is a new cylinder oil of SAE 50 grade that is suitable for the lubrication of the cylinders of low speed crosshead marine diesel engines operating under high temperatures and load conditions, running on fuel with a low sulphur content (ranging between burning 0.3%, or lower, and up to 1.5%). It is highly recommended for 2-stroke marine and stationary engine applications (such as power generation stations, for example) that demand the use of low-sulphur fuel.

## CHARACTERISTICS-BENEFITS

CHARACTERISTICS	BENEFITS
Enhanced technology additive system used to prevent wear.	Maximum protection from adhesive and corrosive wear; prolongation of engine's life cycle, reduced maintenance costs.
Exceptional detergent properties, protects oil system from accidental combustion of residue leakage.	Exceptional engine cleanliness, minimal deposits on piston, piston rings, ring grooves and cylinder ports.
Enhanced boundary lubrication properties.	A lubricant protecting film is permanently retained on engine parts, allowing extended periods between piston overhauls.
Absolutely homogeneous lubricant.	Stable in long-lasting storage.

## PHYSICAL-CHEMICAL CHARACTERISTICS

NAUTILUS LS	METHOD	
SAE		50
Density at 15°C, g/cm <sup>3</sup>	ASTM D1298	0,9091
Viscosity, Kinematic (cSt) 40 <sup>0</sup> C	ASTM D445	220
Viscosity, Kinematic (cSt) 100 <sup>0</sup> C	ASTM D445	19,5
Viscosity index	ASTM D2270	97
Pour point, °C	ASTM D97	-9
TBN, mgKOH/g	ASTM D2896	40
Flash point, COC, °C	ASTM D92	265

The above mentioned characteristics represent mean values.

## SPECIFICATIONS

MAN D&T (NOL)