# MARINA



# MARINE LUBRICANTS

### DESCRIPTION

The CEPSA LARUS 4040 oil offers a perfect combination of the best refined paraffin base oils and additives designed for application in four-stroke marine diesel engines, which use residual fuels, eliminating the problems of "black sludge" formation, and with an excellent oil/fuel compatibility. It is an oil that is suitable for high-sulfur fuels (>1.5%S), depending on the manufacturer's recommendation. Compatible with the use of scrubbers, in relation to compliance with the IMO 2020 regulation. According to the manufacturer's recommendations, it is possible to use it in DF ("Dual Fuel") operations.

Intended for application in the modern medium-speed four-stroke marine diesel engines that use waste fuels with a high sulfur content, the CEPSA LARUS oil 4040, thanks to its high dispersant capacity, which prevents the formation of deposits (asphaltenes) in the engine, in combination with a new family of high-performance detergents, eliminates the accumulation of deposits in the piston rings and keeps the cooling gallery of the piston very clean.

#### **PRODUCT PERFORMANCE**

• The initial value of the base number (TBN) of these oils is designed to be a strong acid neutralizer and maintain an effective residual alkalinity, when they are used in very low-SLOC (Specific Lube Oil Consumption) engines, such as these anti-polishing ring engines.

#### **PRODUCT APPLICATIONS**

- Compatible with the use of scrubbers.
- Excellent alkaline reserve and BN retention.
- It males the lubricant highly compatible with the residual fuel.
- Easy water separation.
- Excellent detergents properties.
- Excellent cleaning of the camshaft, sump and refrigeration area of the piston.
- Excellent control over "black sludge".
- Drastic reduction of deposits in piston rings.
- Because of its high thermal stability, it extends the useful life of the oil.
- It reduces operating and maintenance costs.

# LEVELS OF QUALITY

- MAN B&W Diesel
- WÄRTSILÄ
- MWM Energy DEUTZ

# TYPICAL CHARACTERISTICS

CHARACTERISTICS	UNITS	ASTM STANDARD	CEPSA LARUS 4040
SAE GRADE			40
Density 15 °C	kg/l	D-4052	0.915
Flash point COC	°C	D-92	>230
Pour point	°C	D-97	-27
Cst viscosity at 40 °C	cSt	D-445	140
Cst viscosity at 100 °C	cSt	D-445	14.5
Viscosity index	-	D-2270	97
Base Number, (min)	mg KOH/g	D-2896	40

## 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.

The typical values of the characteristics appearing in the table are average values given for guidance purposes only and do not constitute a guarantee. These values may be modified without any prior warning.