

IMO 2020 REGULATION

New Marine Lubricants by Cepsa



CEPSA

IMO 2020 REGULATION

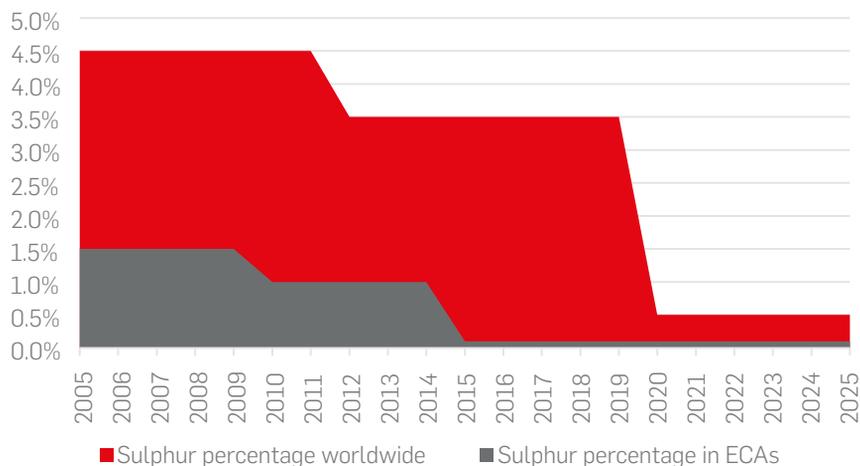
A big change
for the Maritime Industry



IMO 2020 REGULATION

- 🌀 The entry into force of the IMO 2020 regulation on 1 January 2020 is going to mean the greatest change that the Maritime Industry has faced in recent decades. Under a very strict global regulation and with the aim of reducing sulphur oxide emissions, ships will be required to use fuels with a sulphur content not exceeding 0.5% m/m or to ensure an equivalent maximum emission result. Operators who choose to continue using HSFO must equip their vessels with scrubbers and ensure a level of emissions equivalent to that of the fuel that complies with the legislation.
- 🌀 Emission control areas (ECAs) will continue to be capped at the current 0.1% sulphur limit.

Percentage of Sulphur in Fuel



- 🌀 As shown in the graph, the implementation of the IMO 2020 regulation will result in the largest single-phase reduction in sulphur content in the industry in recent decades.
- 🌀 It is estimated that the adoption of these measures will mean a reduction of sulphur oxides (SOX) emissions by more than 80%.



As a reference in the marine market,
Cepsa is ready for the entry into force
of the **new IMO 2020 regulation**



CEPSA AND THE IMO 2020 REGULATION

As a leading company in the manufacture and supply of Marine Lubricants in the Iberian Peninsula, Cepsa has completed its product portfolio by developing new specific lubricants suitable for use in combination with new fuel oils that meet the requirements of the IMO 2020 regulation. The use of such alternative fuels to HSFO has a direct impact on the lubrication of engines and cylinders because the BN of the lubricant must be adjusted to the sulphur content of the fuel and the operating conditions in the engine.

A large proportion of ships with 2-stroke engines will use compliant fuels and will need a lubricant with a BN of 40. For ships operating with 4-stroke engines, the shift will be towards the use of BN 20-30 lubricants. As a result, the company has developed new, specific products with very well-balanced BNs to meet the lubrication requirements of 2-stroke and 4-stroke engines using the new low-sulphur fuels (<0.50%).

2-STROKE ENGINES

HFO

GAVIA Range
CICONIA Range

4-STROKE ENGINES

HFO

LARUS Range

MDO

PETREL Range

MGO

MAR Range

NEW CEPSA MARINE LUBRICANTS

As a benchmark in marine engine lubrication, and in view of the new requirements arising from the entry into force of the new IMO 2020 regulation, Cepsa's Marine Lubricants Department has developed two specific products to adapt to the new rules.

CEPSA GAVIA 4050

 **CEPSA GAVIA 4050** has been specially developed for lubrication of cylinders of slow two-stroke marine engines that use VLSFO (Very Low Sulphur Fuel Oil) fuels with low sulphur content (0.1% to 0.5%).

 With its specific formulation, **CEPSA GAVIA 4050** oil makes it possible for vessel operators to ensure optimum performance of their engines while complying with the new requirements under the IMO 2020 regulation in all areas where fuels are restricted to 0.5% sulphur or less.

CEPSA LARUS 2040

 **CEPSA LARUS 2040** has been specifically formulated for the lubrication of 4-stroke marine diesel engines using VLSFO fuels in accordance with the IMO 2020 regulation. It eliminates the problems arising from the formation of black sludge and has excellent oil/fuel compatibility.

 **CEPSA LARUS 2040** is compatible with low sulphur fuels such as ULSFO (Ultra Low Sulphur Fuel Oil, 0.1% S) and VLSFO (Very Low Sulphur Fuel Oil, 0.5% S). In addition, it can be used in DF (Dual Fuel) operations with LNG (Liquefied Natural Gas). The use of this lubricant with ULSFO, VLSFO and LNG fuels must follow the manufacturer's recommendations.





Cepsa has a complete range of **Marine Lubricants** capable of meeting the demanding **needs of its customers.**





2-STROKE ENGINES - CEPSA

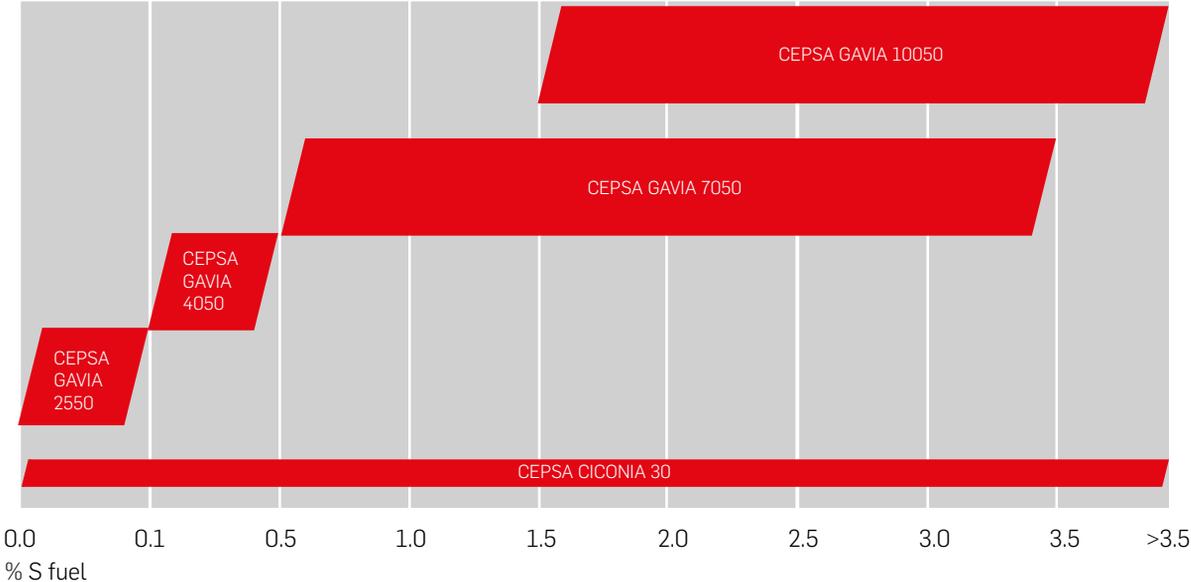
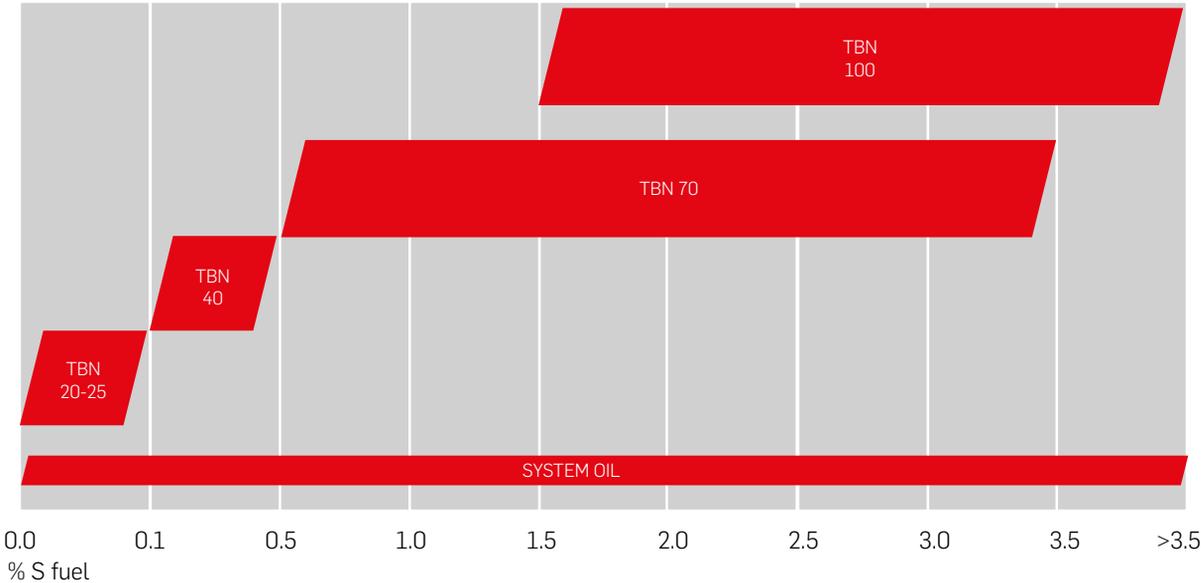
Cepsa's specific range covers the lubrication needs of slow 2-stroke marine diesel engines depending on the fuel the vessel is using.

CEPSA LUBRICANT	BASE NUMBER	SAE GRADE	FUEL
CEPSA GAVIA 10050	100	50	S > 0.5% in the fuel. Use of scrubbers
CEPSA GAVIA 7050	70	50	S > 0.5% in the fuel. Use of scrubbers
CEPSA GAVIA 4050	40	50	0.1-0.5% S in the fuel
CEPSA GAVIA 2550	25	50	≤0.1% S in the fuel, ECA, LGN areas
CEPSA CICONIA 30	5	30	System oil





2-STROKE ENGINES - CEPSA



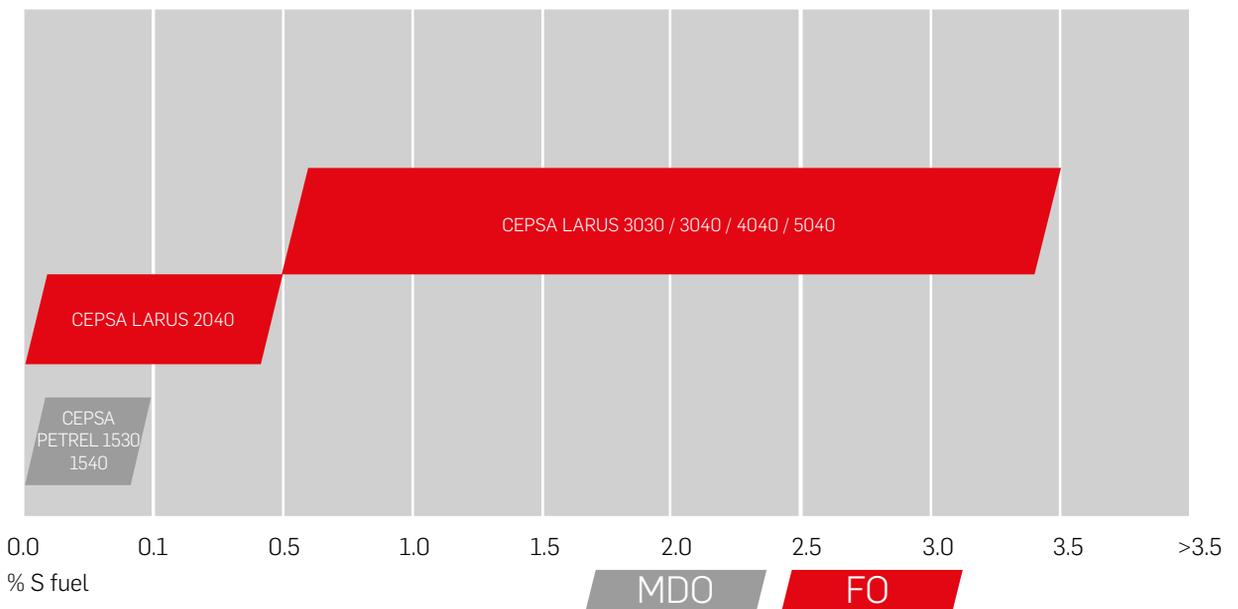
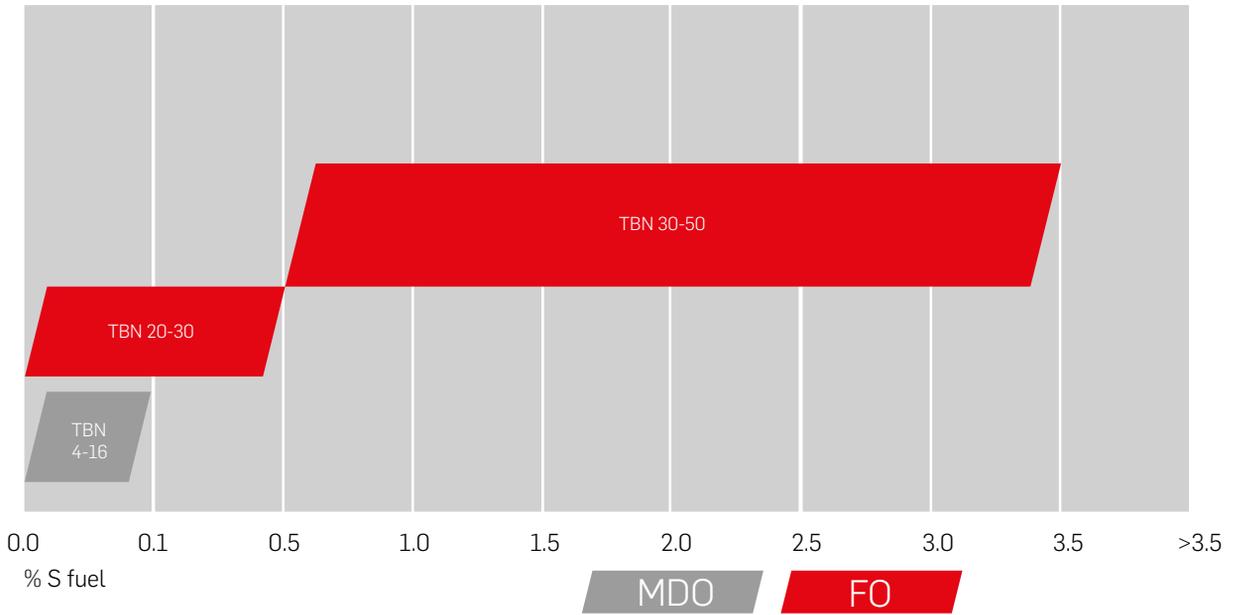


CEPSA MEDIUM-SPEED 4-STROKE ENGINES

Cepsa has a complete range for lubricating medium-speed 4-stroke marine diesel engines depending on the type of fuel used by the vessel.

CEPSA LUBRICANT	BASE NUMBER	SAE GRADE	FUEL
CEPSA LARUS 2040	20	40	0.1% -0.5% S in the fuel
CEPSA LARUS 3030	30	30	S ≥ 0.5% in the fuel
CEPSA LARUS 3040	30	40	S ≥ 0.5% in the fuel
CEPSA LARUS 4040	40	40	S > 0.5% in the fuel. Use of scrubber
CEPSA LARUS 5040	50	40	S > 0.5% in the fuel. Use of scrubber
CEPSA PETREL 1530	15	30	MDO
CEPSA PETREL 1540	15	40	MDO
CEPSA PETREL HDL 40	15	40	MDO. Antilackering

MEDIUM-SPEED 4-STROKE ENGINES





FAST 4-STROKE ENGINES - CEPSA

Marine lubricants specially developed for fast diesel engines working under very demanding operating conditions.

Cepsa ULTRAMAR SHPD 15W40 extends the changeover period with respect to the majority of lubricants on the market thanks to its greater TBN reserve.

CEPSA LUBRICANT	BASE NUMBER	SAE GRADE	FUEL
CEPSA MAR SHPD 15W40 15W40	9	15W40	MGO
CEPSA ULTRAMAR SHPD 15W40	15	15W40	MGO





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