

## MARINE LUBRICANTS

## CEPSA MISTRAL

### DESCRIPTION

A lubricant oil based on highly refined paraffinic base oils and selected additives that provide it with the required properties for HM-type anti wear and tear hydraulic fluids that are recommended for hydraulic systems in boats.

#### PRODUCT APPLICATION

- Formulated to satisfy the needs of high-pressure marine hydrostatic systems (especially those with latest generation pistons and vane pumps).
- They are recommended for many circulation, splashing, bath and ring systems in the lubrication of Bearings and Gearboxes for marine use.
- The ISO VG 46 grade covers the viscosity requirements of most marine hydraulic systems and therefore reduces the stock of oils to be applied on any boat.
- The ISO VG 68 grade is recommended for marine hydraulic systems operating at High Temperatures and/or High Pressures.

#### PRODUCT PERFORMANCE

- High separation capability of water contaminants (demulsification).
- High resistance to foaming and good trapped air release.
- High anti-wear capability.
- Resistant to the formation of sludge and deposits.
- High protection against corrosion and rust.
- High resistance to oxidation.
- Excellent performance in relation to seals and elastomers.
- Excellent filterability.

### SPECIFICATIONS

- DIN 51524 Part 2 HLP
- AFNOR NF-E 48-603 HM
- BOSCH-REXROTH 90220 (ISO 46)
- VOITH Variable Speed Drives (ISO 32)
- ISO 6743-4 HM
- AFNOR FILTERABILITY (Dry&Wet)
- EATON Brochure 03-401-2012
- ISO 11158 HM
- PARKER DENISON HF-0, HF-1, HF-2
- FIVES CINCINNATI P-68 (ISO 32), P-69 (ISO 68), P-70 (ISO 46)

### TYPICAL CHARACTERISTICS

CHARACTERISTIC	UNITS	STANDARD	CEPSA MISTRAL		
ISO GRADE			32	46	68
Density at 15°C	Kg/l	ASTM D-4052	0.874	0.878	0.883
Flash point, V/A	°C	ASTM D-92	204	204	210
Freezing point	°C	ASTM D-5950	-24	-24	-21
Viscosity at 40°C	cSt	ASTM D-445	32	46	68
Viscosity at 100°C	cSt	ASTM D-445	5.5	6.8	8.7
Viscosity index	-	ASTM D-2270	109	102	100
Copper corrosion 3h, 100°C	-	ASTM D-130	1b	1b	1b

### 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 in accordance with the 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.