



## MARINE LUBRICANTS

# CEPSA RADA XMP 🛁

#### DESCRIPTION

Very high quality mineral-based lubricating oils formulated with Sulphur-Phosphorus Extreme Pressure additives (EP), developed for all types of industrial and marine steel gearboxes. They also contain anti-rust and anti-corrosion additives, as well as special agents to increase oxidation stability and resistance to foam formation.

#### **PRODUCT APPLICATION**

• Specially recommended to lubricate a wide range of gears installed in industrial and marine equipment built from steel in closed crankcases, operating in severe conditions and subjected to high impacts, including those running at very high speeds.

• Its excellent Extreme Pressure properties make it essential for certain heavily loaded gearboxes and low speeds, where there is a risk of "micropitting", as is the case with certain marine gearbox manufacturers.

## SPECIFICATIONS

- DIN 51517 Part 3 CLP
- AIST 224
- MÜLLER WEINGARTEN
- IBERCISA (ISO 220 y 320)

#### **PRODUCT PERFORMANCE**

- Excellent lubricating abilities. Reduces friction coefficient in thin film lubrication conditions.
- Excellent thermal and oxidation stability. Prevents sludge formation at high temperatures.
- High anti-corrosion and anti-rust power in the presence of moisture.
- High resistance to the formation of foams and emulsions with water.
- Enables a controlled break-in by preventing the gearbox teeth from breaking.
- Limits the loss of friction power, with smooth, consistent and quiet gear operation.
- Lengthens gearbox life by minimising oxidation compounds, wear particles and deposits in general.
- Excellent compatibility with joint materials.
- ISO 12925-1 Type CKC/CKDDAVID BROWN \$1.53.101 Type E

• SCHOTTEL (ISO 100 y 150)

- AGMA 9005-F16 AntiScuff
- FIVES CINCINNATI P-Specs
- SIEMENS FLENDER AG Rev. 13

### TYPICAL CHARACTERISTICS

CHARACTERISTIC	UNITS	METHOD	CEPSA RADA XMP					
ISO Grade			68	100	150	220	320	460
Density at 15°C	Kg/l	ASTM D-4052	0.886	0.892	0.896	0.899	0.904	0.907
Flash Point, C.O.C.	°C	ASTM D-92	217	229	256	265	245	257
Freezing point, max.	°C	ASTM D-5950	-24	-21	-24	-21	-18	-15
Viscosity at 40°C	cSt	ASTM D-445	65.1	98.1	147.3	215.5	312.7	449.1
Viscosity at 100°C	cSt	ASTM D-445	8.6	11.2	14.7	18.9	24.2	30.2
Viscosity index	-	ASTM D-2270	103	100	99	98	98	96
FZG Scuffing Test, fault stage	-	DIN 51354-2	>12	>12	>12	>14	>14	>14
FZG Micropitting Test, fault stage	-	FVA 54	>10	>10	>10	>10	>10	>10
Copper Corrosion (3h/100°C)	-	ASTM D-130	1B	1B	1B	1B	1B	1B
Rust Protection	-	ASTM D-665	Pass	Pass	Pass	Pass	Pass	Pass

#### 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.