

## DESCRIPTION

Sulfophosphorous extreme pressure gear oils.

## APPLICATIONS

- All types of gears and bearings which require an "Extreme Pressure" lubricant.
- Typical applications aboard ship, include gear drives for the main propulsion system and also :
  - centrifuges
  - deck machinery
  - elevators...

## PROPERTIES

- Excellent resistance to oxidation.
- Low pour point.
- Good demulsibility.
- Good antirust properties.
- Non-corrosive to copper metals.
- Very good anti-wear and extreme pressure properties.

**EPONA Z** range meets the following specifications:

NF-ISO 6743-6 category CKD  
 DIN 51517 Part 3 (group CLP)  
 AGMA 9005-D94EP

**EPONA Z** range conforms to conditions for manufacturer approvals such as DAVID BROWN, FLENDER...

## CHARACTERISTICS

CHARACTERISTICS	METHODS	UNITS	EPONA Z					
			68	100	150	220	320	460
ISO Grade			68	100	150	220	320	460
Density at 15 °C	ISO 3675	kg/m <sup>3</sup>	881	884	892	893	901	903
Kinematic viscosity at 40 °C	ISO 3104	mm <sup>2</sup> /s	68.1	107	153.4	216.9	319.1	452.2
Kinematic viscosity at 100 °C	ISO 3104	mm <sup>2</sup> /s	8.7	11.8	14.8	18.5	23.7	29.9
Viscosity index	ISO 2909		99	98	96	95	93	95
Flash Point (COC)	ISO 2592	°C	230	233	227	270	264	256
Pour Point	ISO 3016	°C	- 24	- 21	- 27	- 21	- 15	- 12
FZG Test A/8.3/90	DIN 51 354/2		13 <sup>th</sup>					
FZG micropitting FVA IIV	FVA 54	-	-	-	-	10 <sup>th</sup>	10 <sup>th</sup>	10 <sup>th</sup>
GFT class		-	-	-	-	high	high	high

Characteristics of this chart are indicative typical values

## *HANDLING, HEALTH AND SAFETY*

Lubricants consisting of highly refined mineral oils with specific additives.

In normal conditions of use, these lubricants present no particular toxic hazard.

All lubricants, of any kind, should always be handled with great care, particularly avoiding any contact with the skin.

Prevent any risk of splashing, and keep away from combustible materials.

Store under cover and away from any risk of contamination.

A safety data sheet complying with current legislation is available on [www. quickfds.com](http://www.quickfds.com) or [www.lubmarine.com](http://www.lubmarine.com).

The values shown above are typical values at the date of publication. TOTAL Lubmarine reserves the right to change these typical values without prior notice.



TOTAL LUBRIFIANTS  
562 avenue du Parc de l'Île – 92029 Nanterre Cedex  
Tel.: 33.1.41.35.59.23 – Fax: 33.1.41.35.20.92  
[www.lubmarine.com](http://www.lubmarine.com) - [rm.tma-diagomarplus@total.com](mailto:rm.tma-diagomarplus@total.com)

LUBMARINE 60/5GB 1008