## MEDRIPAL 412



## Industrial & Marine **Engine Oil**



## **Product Description**

MEDRIPAL 12 SERIES is formulated from HVI (High Viscosity Index) base oils with additive package specially designed for medium speed diesel engines.

MEDRIPAL 12 SERIES has sufficient TBN to neutralize combustion acid; provides optimum protection against rust, corrosion & excessive wear; has a good balance between oxidation stability, detergency and dispersancy to prevent piston deposit formation and maintain engine cleanliness; and also able to easily separate from dirt and water through centrifugal separator.

### **Applications**

MEDRIPAL 12 SERIES is designed especially for lubrication of medium speed trunk piston industrial and marine diesel engines burning distillate diesel fuel with sulfur content less than 0.5 % wt.

TYPICAL CHARACTERISTICS				
Characteristics	Test Method	MEDRIPAL 312	MEDRIPAL 412	MEDRIPAL 512
SAE Viscosity Grade	-	30	40	50
Density 15 °C, Kg/L	ASTM D - 4052	0.8957	0.8971	0.9010
Kinematic Viscosity at 40 °C, cSt	ASTM D - 7279	109.3	141.80	223.5
at 100 °C, cSt	ASTM D - 7279	11.85	14.35	19.29
Viscosity Index	ASTM D - 2270	96	98	98
ASTM Colour	ASTM D - 1500	L 5.0	4.5	5.0
Flash Point, °C	ASTM D - 92	260	270	270
Pour Point, °C	ASTM D - 5950	-18	-18	-18
Total Base Number, mg KOH/g	ASTM D - 2896	15	15	15

#### Performance Levels

MEDRIPAL 12 SERIES has been approved by Yanmar.

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Health and Safety

Please contact our Industrial Marketing Head Office to get Material Safety Data Sheet as information for Health and

Safety Protection Phone: 62-21 3190 7190/5 Fax: 62-21 314884/601

Email: hss<u>e.ptpl@pertamina.com</u>

#### www.pertaminalubricants.com

#### Disclaimer:

Information presented in this Product Data Sheet is as accurate as possible prior to printing. Such information is based upon standard industry tests under controlled laboratory conditions and presented as a guide only. To assess product suitability for its intended application, it is recommended that users refer to the latest version of the Product Data Sheet because the information contained herein is subject to change, without notice, due to the upgrades in product formulation, manufacturers' equipment specifications, user applications and storage.

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