



12 - SERIES

Formulated from High Viscosity Index (HVI) base oil with additives specially designed for medium speed diesel engines.

MEDRIPAL 12 series has sufficient total base number 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.

Diformulasikan dari base oil *High Viscosity Index* (HVI) dengan aditif yang didesain khusus untuk pelumas mesin diesel putaran sedang.

MEDRIPAL 12 series memiliki nilai angka basa total yang memadai untuk menetralkan asam hasil pembakaran; memberikan perlindungan optimal terhadap karat, korosi dan keausan berlebihan; memiliki keseimbangan yang baik antara kestabilan oksidasi, *detergency* dan *dispersancy* untuk mencegah pembentukan deposit pada piston dan menjaga kebersihan mesin serta dapat terpisah dengan mudah dari kotoran dan air melalui *centrifugal separator*.

Typical Characteristics

Characteristics	Test Method	MEDRIPAL 312	MEDRIPAL 412	MEDRIPAL 512
SAE Viscosity Grade	-	30	40	50
Density at 15 °C, kg/L	ASTM D4052	0.8936	0.8968	0.9010
Kinematic Viscosity at 40 °C, cSt	ASTM D7279	107.0	142.3	223.5
at 100 °C, cSt	ASTM D7279	11.91	14.38	19.29
Viscosity Index	ASTM D2270	100	99	98
Flash Point, °C	ASTM D92	260	278	270
Pour Point, °C	ASTM D97	-18	-18	-18
Total Base Number, mg KOH/g	ASTM D2896	15	15	15

SPECIFICATIONS / APPROVALS

- Yanmar
- API CF

APPLICATIONS

MEDRIPAL 12 series is designed for medium speed trunk piston industrial and marine diesel engines burning distillate diesel fuel with sulphur content less than 0.5 % weight.

MEDRIPAL 512 is not designed for cylinder lubrication of two stroke crosshead diesel engine.

SPESIFIKASI / APPROVAL

- Yanmar
- API CF

PENGUNAAN

MEDRIPAL 12 series didesain untuk pelumasan mesin diesel industri dan perkapalan putaran sedang tipe *trunk piston* yang menggunakan bahan bakar jenis distilat dengan kandungan sulfur di bawah 0,5 % berat.

MEDRIPAL 512 tidak didesain untuk pelumasan silinder mesin dua langkah tipe *crosshead*.