

VOYAGER MARINE 312, 412

DESCRIPTION

VOYAGER MARINE 312, 412 are high performance trunk piston engine oils for medium speed marine. They are blended using solvent-refined high viscosity index paraffin mineral base oil with chemical additive which provide effective alkalinity, wear resistance, detergent/dispersant and water separating properties.

APPLICATIONS

VOYAGER MARINE 312, 412 are recommended for crankcase lubrication in medium-speed marine type diesel engines. They can also be used to separate bearing lubrication and piston cooling of large cross-head type engines under severe service conditions at appropriate viscosity grades.

BENEFITS

- Improved anti-wear properties, reduces ring and liner wear.
- Reduces port and under crown deposits.
- Cleaner engine operation.
- Increased protection against cylinder and bearing wear.
- Outstanding thermal and oxidation stability over extended periods.
- Controls black sludge deposits.

PERFORMANCE LEVEL

API CF

PRODUCT TYPICAL CHARACTERISTICS

PROPERTIES		UNITS	VALUE		TEST METHOD
Product		-	312	412	-
Specific Gravity	@ 15°C	-	0.8960	0.9005	ASTM D-1298
Viscosity	@ 40°C	mm ² /s	107.0	142.0	ASTM D-445
	@ 100°C	mm ² /s	11.60	14.0	ASTM D-445
Viscosity Index		-	95	95	ASTM D-2270
Flash Point	COC	°C	240	250	ASTM D-92
Pour Point		°C	-18	-15	ASTM D-97
Base Number		mg KOH/g	12.3	12.3	ASTM D-2896
Color		-	3.5	4.0	ASTM D-1500