

Opt-Max Vertguard 60110

VERSATILE MARINE CYLINDER OIL

Opt-Max Vertguard 60110 is formulated with carefully selected base oils and proven additives which meet the operational challenges of modern 2-Stroke engines that are operating with varying loads and varying fuel sulphur content.

Product Description

Opt-Max Vertguard 60110 is a premium quality, high alkaline adaptable cylinder oils fit for use in low speed Two-stroke marine diesel engines operating on heavy fuel oil. Specially for operation which may lead to significant cold corrosion such as slow steaming or T/C cut out and when the operator intend to keep the cylinder lubrication feed rate at the lowest optimum. It has been specially designed for allowing its blending with system oil in order to reach a fit for purpose BN value.

Features and Benefits

- Exceptional acid neutralisation capabilities and cold corrosion protection which help to improve the time between overhauls of components.
- Excellent ability to be blend down to a lower BN with system oil while keeping its main functional characteristics and offering optimum performance.
- Exceptional detergency and dispersancy properties which help:
 - Reduce and clean potential deposits between cylinder liner and piston.
 - Prevents ring sticking.
- Outstanding lubrication oil film build up properties that help maintain an oil film under severe, high load conditions, thereby reducing frictional wear and preventing scuffing of liners, pistons and rings.
- Excellent oxidation and thermal stress resistance that allow the oil to keep its performance under varying engine operation conditions and engine loading up stresses.
- Outstanding anti-wear properties that help protect against excessive cylinder liner and piston ring wear, thus allowing prolonged service intervals.

Applications

- Opt-Max Vertguard 60110 is recommended for operating conditions and engine types which are sensitive to cold corrosion and where use of a high alkalinity lubricant is recommended.
- Opt-Max Vertguard 60110 is recommended for operation with engines equipped with a Blending on Board system.
- Opt-Max Vertguard 60110 can be blend down to fit varying operating engine conditions

Applications (continued)

- During low feed rate operations, it is crucial that the actual cylinder and piston rings conditions are inspected on a regular basis. Please refer to the latest OEM's recommended cylinder oil feed rate.
- Opt-Max Vertguard 60110 meets the requirements of many major engine manufacturers, including MAN B&W and Wärtsilä.

Specifications

Product Properties		Opt-Max Vertguard 60110	Testing Methods
SAE Grade	-	60	-
Kinematic Viscosity (40°C)	mm ² /s	334.3	ASTM D445
Kinematic Viscosity (100°C)	mm ² /s	26.0	ASTM D445
Density at 15°C	Kg/m ³	965.1	ASTM D4052
TBN	mgKOH/g	112.3	ASTM D2896
Viscosity Index	-	102	ASTM D2270
Flash Point	°C	>230	ASTM D92
Pour Point	°C	<-6	ASTM D97

* Above product typical properties are indicative and subject to change without prior notice

Storage and Handling

- All storage equipment, tanks, pipes, valves and etc. apparatus have to be cleaned thoroughly and inspected to be clean for use before transferring or transporting Opt-Max Vertguard 60110.
- Opt-Max Vertguard 60110 must be stored in dedicated storage tanks/equipment and it is recommended to be stored in an indoor controlled environment.
- Storage tanks/equipment must be waterproof, mist-proof and free from other mechanical particles.
- Opt-Max Vertguard 60110 must be clearly labelled properly during the entire transportation process to prevent the risk of mixing with other petrol-chemical product.

Health & Safety

Opt-Max Vertguard 60110 is unlikely to present any significant health or safety hazard when properly used in the recommended application. This product must always be handled with care, particularly avoiding skin contact. For further guidance on Product Health & Safety refer to the appropriate Opt-Max Vertguard 60110 Material Safety Data Sheet.