

Opt-Max Shieldguard 3015, 4015

MARINE TRUNK PISTON ENGINE OIL

Lubricant for Marine Trunk Piston Engines



Opt-Max Shieldguard 3015, 4015 are formulated with carefully selected base oils and proven additives for Marine Trunk Piston Engines operating on distillate fuels.

Product Description

Opt-Max Shieldguard 3015, 4015 are premium quality marine trunk piston lubricant designed for use in medium speed marine trunk piston and auxiliary engines operating on distillate fuels. It has several outstanding properties such as thermal and oxidation stability, excellent water separation, high load carrying properties and corrosion protection which helps to prolong the life span of the engine.

Features and Benefits

- Good detergency and dispersancy properties that maintain engine cleanliness and minimise deposits formation in cylinder piston and liner.
- Enhanced anti-wear properties that reduce piston and liner abrasion under severe operating environment.
- Excellent corrosion protection that helps to reduce damage and corrosion to the cylinder and piston.
- Outstanding thermal, oxidation and alkalinity stability that help to protect engine components from thermal stresses and reduce under-crown deposits while promoting extended lubricant life.
- Excellent water resistance and separation capability for easy removal of water contaminating the oil via centrifuge.

Applications

- Opt-Max Shieldguard 3015, 4015 are recommended for use in medium speed main propulsion and auxiliary marine trunk piston engine operating on distillate fuels.
- Opt-Max Shieldguard 3015, 4015 may be used for the running-in of slow speed two-stroke crosshead engines.
- General lubrication of shipboard equipment, where specialised lubricants are not required.

Specifications

Product Properties		Opt-Max Shieldguard 3015	Opt-Max Shieldguard 4015	Testing Methods
SAE Grade	-	30	40	-
Kinematic Viscosity (100°C)	mm ² /s	11.5	14.5	ASTM D445
Density at 15°C	Kg/m ³	893.1	903.1	ASTM D4052
Density at 20°C	Kg/m ³	890.0	900.0	ASTM D4052
TBN	mgKOH/g	15	15	ASTM D2896
Viscosity Index	-	90	90	ASTM D2270
Flash Point	°C	238	238	ASTM D93
Pour Point	°C	-18	-15	ASTM D97
FZG Fail Load Stage	-	11	11	DIN 51354

* 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 has to be cleaned thoroughly and inspected to be clean for use before transferring or transporting to prevent contamination with Opt-Max Shieldguard 3015, 4015
- Opt-Max Shieldguard 3015, 4015 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 Shieldguard 3015, 4015 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 Shieldguard 3015, 4015 are unlikely to present any significant health or safety hazard when properly used in the recommended application. These products must always be handled with care, particularly avoiding skin contact. For further guidance on Product Health & Safety refer to the appropriate Opt-Max Shieldguard 3015, 4015 Material Safety Data Sheet.