

Opt-Max Flexguard 140

Opt-Max Flexguard 140 is a concentrate that can be used to blend into cylinder oil to varying BN levels. It can also be used as a cylinder oil where high alkalinity lubricant is recommended.



Product Description

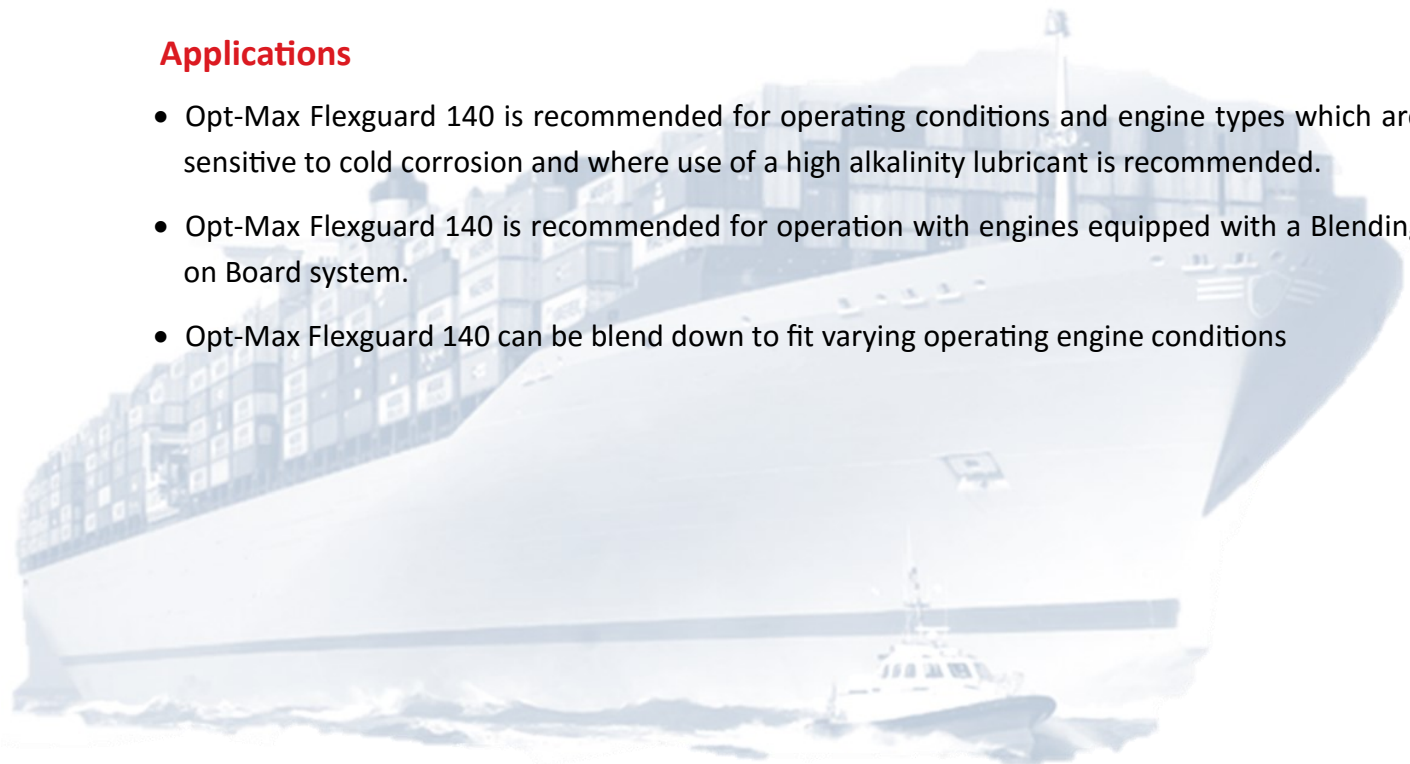
Opt-Max Flexguard 140 is uniquely formulated to blend effectively with system oil in use in the engine to produce an optimized cylinder lubricant with a variable base number in low speed crosshead diesel engines.

Features and Benefits

- Provides excellent cold corrosion protection by enhanced neutralization of acidic species.
- Minimizes deposit formation on the piston and prevents ring sticking.
- Excellent detergency and dispersancy which effectively reduces and cleans potential deposits between cylinder liner and pistons.
- Maintains an oil film during severe and high load conditions that reduces frictional wear and prevents scuffing of liners, pistons and rings.
- Improved wear resistance for cylinder liner.
- Compatible with single-phase alkaline diesel cylinder lubricants commonly used in the international market.

Applications

- Opt-Max Flexguard 140 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 Flexguard 140 is recommended for operation with engines equipped with a Blending on Board system.
- Opt-Max Flexguard 140 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 Flexguard 140 meets the requirements of many major engine manufacturers, including MAN B&W and Wärtsilä.

Specifications

Product Properties		Opt-Max Flexguard 140	Testing Methods
SAE Grade	-	60	-
Kinematic Viscosity (40°C)	mm ² /s	350.5	ASTM D445
Kinematic Viscosity (100°C)	mm ² /s	25.9	ASTM D445
Density at 15°C	Kg/m ³	985.8	ASTM D4052
TBN	mgKOH/g	140.0	ASTM D2896
Viscosity Index	-	97	ASTM D2270
Flash Point	°C	>240	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 Flexguard 140.
- Opt-Max Flexguard 140 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 Flexguard 140 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 Flexguard 140 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 Flexguard 140 Material Safety Data Sheet.