



# PRODUCT DATA SHEET

## GulfSea Cylcare ECA 50

*Marine Cylinder Oil specially designed for All Low Speed 2-stroke Marine Diesel Engines when operating in a MARPOL Annex VI Emission Control Area (ECA) using max 0.1%wt sulphur heavy fuel oil (HFO) or marine gas oil (MGO)*

### Product Description

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**GulfSea Cylcare ECA 50** is a specially formulated extremely high performing Marine Cylinder Lubricant (MCL) for use in all generations of two stroke low speed crosshead diesel engines including the very latest super long stroke models when operating in MARPOL Annex VI Emission Control Areas (ECA).

The content of sulphur in marine fuel is limited when operating in ECAs to <0.1%wt (except when operating with an exhaust gas SO<sub>2</sub> scrubber). When burning 0.1%wt sulphur fuel the continued operation on high BN cylinder oil is inappropriate. The excess BN additive of the standard MCL may result in crown land deposit build-up and consequent bore polishing.

**GulfSea Cylcare ECA 50** is rebalanced cylinder oil with a reduced BN additive system combined with an advanced new marine detergency additive technology. **GulfSea Cylcare ECA 50** minimises excess piston crown deposits, neutralizes condensing acids and ensures that the liners and ring pack remain clean with free ring movement and extended Time Between Overhauls (TBO).

**GulfSea Cylcare ECA 50** offers a safety margin of performance with sufficient BN to scavenge and neutralize any acid condensation on liner walls. This lubricant is suitable for both MGO and new low sulphur HFO being introduced as distillate substitutes. It is strongly recommended that the suitability of non MGO fuel products is checked with the fuel supplier and engine maker before using.

### Features & Benefits

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- Outstanding detergency capability minimizes deposits on critical parts viz. pistons, piston rings, ring grooves and cylinder ports.
- Low BN for residual acid scavenging and neutralization capability whilst achieving OEM's specified residual BN reserve in scrape down oil.
- Enhanced anti-wear property minimizes piston ring & cylinder wear leading to reduced maintenance costs.
- Compliant with MARPOL Annex VI Regulation 14 for marine fuels with <0.1%wt Sulphur.
- Excellent thermo-oxidative stability reducing deposit and sludge formation.
- Zero ash content minimizing deposits and reducing environmental footprint.
- Good compatibility with all normal seal materials.

### Applications

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- Cylinder lubrication of all generations including the latest MAN Mk 8.2 to Mk 9 & G type engines and Wärtsilä RT-Flex & W-X engines operating on very low sulphur fuels, <0.1%wt and natural gas.
- The recommended manufacturers feed rate should be maintained. It is highly recommended to inspect the liners via a scavenge port inspection upon initial and subsequent switches to **GulfSea Cylcare ECA 50**.
- Changeover to **GulfSea Cylcare ECA 50** should be undertaken, upon entering an ECA, at the next daily top-up of the cylinder oil day tank. When changing back to high sulphur fuel oil, upon leaving an ECA, the cylinder oil should be switched on the day prior, during the daily top-up of the cylinder oil day tank.



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## Typical Properties

GulfSea Cylcare ECA 50		
Typical Properties	SAE Grade	50
Test Parameters	ASTM Method	Typical Values
Viscosity @ 100°C, cSt	D 445	19.0
Viscosity Index	D 2270	107
Flash Point, °C	D 92	270
Pour Point, °C	D 97	-18
Density @20°C, kg/l	D 4052	0.899
Detergency	Panel Coker	Exceeds Industry Standard

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