

### Description

**elin CDO 40 MCII**, the latest addition to **elin Marine Lubricants** range of cylinder oils meeting the highest performance standards, is designed to provide improved marine engine protection over previous generation of low Base Number (BN) formulations. Particularly intended for lubricating the cylinders of the slow-speed cross-head (2 stroke) engines running on **VLSFO (DM/RM) Sulphur content 0,50% max or partially in ECA areas using ULSFO (DM/RM) with sulphur content 0,10% max**, blended from highly refined, base oils and carefully selected new generation additives to provide superior ring and liner wear protection and excellent piston cleanliness in crosshead engines.

### Typical uses

**elin CDO 40 MCII**, is recommended for the cylinder lubrication of all crosshead marine diesel engines continuously using **VLSFO (DM/RM) Sulphur content 0,50% max or partially in ECA areas using ULSFO (DM/RM)** with a sulphur content 0,10% max fuel and operating at high specific power outputs and high thermal loads.

### Main Performance Features

1. Offers enhanced piston and piston ring pack cleanliness and liner wear protection as a result of high dispersant and detergent effectiveness, at a moderate BN level
2. Protects the latest engine designs operating on fuels with a sulfur content of 0,5% and lower from wear and corrosion
3. Further extends thermal stability
4. Improves scavenge space and exhaust track cleanliness by having significantly lower sulfated ash content than existing MAN ES Category II 100 and 140 BN lubricants
5. Avoids alternating between high and low BN cylinder oils to improve piston cleanliness, simplifying operations
6. Fully compatible with all mineral cylinder oils.

### Oil feed rates:

Follow the engine manufacturers recommended cylinder oil feed rates as the minimum and also take into consideration the fuel oil sulphur content level.

### Recommendations / Approvals

**elin CDO 40 MCII** is Approved For:

✓ **MAN ES (Category II cylinder oils) NOL**  
(EDD3/ELMO/ELUC/JAP/BSAM Case No.: 39607-2024)

### (\*) Typical Characteristics

SAE	50
Density at 15°C, Kg/l	0,920
Kin. Viscosity at 100°C, cSt	18,80
Kin. Viscosity at 40°C, cSt	193
Flash point (C.O.C.), °C	109
Pour Point, °C	-12
Base Number, mg KOH/g	40
Calcium % wt	1,40
Zinc % wt	0,05
Phosphorous % wt	0,05
Magnesium % wt	0,006

(\*) (The above figures are typical of those obtained within normal production tolerances, and do not constitute a specification)