

**Description**

**elin CDO 40 VLS** is a high-performance **40 BN SAE 50 cylinder lubricant** particularly intended for lubricating the cylinders of the slow-speed crosshead (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** according to the new IMO 2020 regulations.

\*ULSFO-DM=Ultra low sulphur fuel oil – distillate marine  
 \*ULSFO-RM=Ultra low sulphur fuel oil – residual marine  
 \*VLSFO-DM=Very low sulphur fuel oil – distillate marine  
 \*VLSFO-RM=Very low sulphur fuel oil – residual marine

**elin CDO 40 VLS** is blended from highly refined, paraffinic base oils and carefully selected new generation additives to provide superior ring.

**Main Performance Features**

1. Wear Protection ( combats deposits and scuffing related engine wear issues )
2. Detergent/Dispersant Properties
3. Excellent corrosion inhibitor and anti-oxidant properties

**( \* ) Typical Characteristics**

SAE	50
Density at 15°C, Kg/l	0,92
Kin. Viscosity at 100°C, cSt	20,0
Kin. Viscosity at 40°C, cSt	232
Viscosity Index	99
Flash point (C.O.C.), °C	238
Pour Point, °C	-12
Base Number, mg KOH/g	40
Sulphated ash, mass %	5,0

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

4. Excellent Lubrication properties
5. Storage Stability
6. Fully compatible with all the mineral cylinder oils and liner wear protection and excellent piston cleanliness in crosshead engines

**Typical uses**

**elin CDO 40 VLS** is recommended for the cylinder lubrication of all crosshead marine diesel engines continuously using VLSFO or partially ULSFO (limited duration up to 300 hr) and operating at high specific power outputs and high thermal loads.

**Oil feed rates:**

Follow the engine manufacturers (OEM) recommended cylinder oil feed rates as the minimum and also take into consideration the fuel oil sulphur content level. Insufficient cylinder oil feed rates can lead to excessive wear, seized and broken rings which may result in blow by and formation of excessive deposits.

