

MRN MCL 70

Marine Cylinder Oil | BN70 | SAE 50

A high-alkalinity, high-viscosity cylinder lubricant engineered for the cylinder lubrication of low-speed, two-stroke crosshead marine diesel engines operating on high-sulphur residual (HSFO) fuels. Formulated with premium base stocks and a robust overbased detergent system for reliable acid neutralisation, deposit control, and liner protection under sustained high thermal and mechanical load.

PRODUCT DESCRIPTION

AEROX MRN MCL 70 is formulated using select virgin base oils blended with a high-BN calcium-based detergent-dispersant additive package. The oil is engineered to neutralise corrosive sulphuric acid formed during combustion of high-sulphur fuel oils, control piston and ring-belt deposits, and maintain a stable, effective lubricating film on cylinder liners under the extreme pressures and temperatures found in slow-speed crosshead marine engines.

APPLICATIONS

- Cylinder lubrication of low-speed, two-stroke crosshead marine diesel engines (e.g., MAN B&W, WinGD/Sulzer designs) running on high-sulphur residual fuel oil (HSFO up to ~3.5% S).
- Suitable where engine builder / OEM feed-rate guidance calls for a BN 70 cylinder lubricant.
- Compatible with normal oil seal materials used in marine cylinder lubrication systems.

TYPICAL CHARACTERISTICS

Characteristic	Unit	Typical Value
Appearance	—	Clear, bright, amber to dark brown liquid
Density @ 15°C	kg/L	0.990 - 1.000
Kinematic Viscosity @ 40°C	cSt	220 - 230
Kinematic Viscosity @ 100°C	cSt	19.0 - 20.5
Viscosity Index	—	≥ 90
Base Number (BN), ASTM D2896	mg KOH/g	68 - 72
Sulphated Ash, ASTM D874	% wt	8.0 - 9.5
Flash Point (COC), ASTM D92	°C	≥ 250
Pour Point, ASTM D97	°C	≤ -12
Water Content, ASTM D95 / D6304	% wt	≤ 0.10
Sulphur Content	% wt	0.3 - 0.6

These figures are typical values and do not constitute a specification. Minor variations within normal manufacturing tolerance may occur. Refer to the corresponding batch Certificate of Analysis for guaranteed values.

KEY FEATURES & BENEFITS

- High reserve alkalinity (BN 70) for effective, sustained neutralisation of corrosive combustion acids from high-sulphur fuels.
- Robust detergency limits piston deposit build-up and ring-belt fouling, supporting steady ring and liner condition.
- Strong oil film strength at elevated liner-wall temperatures reduces scuffing and abnormal wear risk.
- Good demulsibility and filterability supporting clean, reliable feed-rate performance.
- Consistent batch-to-batch quality backed by AEROX Marine's in-house quality control.



HANDLING & STORAGE

- Store in a covered, dry area between 0°C and 45°C, away from direct sunlight and ignition sources.
- Keep containers tightly closed when not in use to avoid moisture ingress and contamination.
- Avoid prolonged skin contact; use impervious gloves when handling used oil. Refer to the Safety Data Sheet (SDS) for complete handling, storage, and disposal guidance.
- Dispose of used oil through anauthorised waste-oil collection channel; do not discharge into drains, soil, or water.

PACKAGING

Available in 26L, 50L, 210L drums and bulk/tanker quantities. Contact your AEROX representative for other pack size requirements.

AEROX MARINE This Technical Data Sheet is issued for guidance only. Values shown are typical of current production and may be revised without prior notice.