

MARINÖL Marine Oil 4T SAE 15W-40 API CI-4

Product Description

MARINÖL MARINE 4T SAE 15W-40 CI-4 is a fully synthetic, heavy-duty marine engine oil specifically engineered for modern high-speed diesel engines operating under extreme marine conditions. With a high TBN value of 15, it provides outstanding protection against acid corrosion, soot loading, and thermal breakdown. Designed for reliability in both fresh and saltwater environments, it ensures maximum durability, engine cleanliness, and extended oil life.

Application

- Marine diesel engines (turbocharged or naturally aspirated)
- Fishing boats, tugboats, ferries, offshore support vessels, and harbor crafts
- Onboard diesel generator sets and auxiliary engines
- High-load diesel engines requiring API CI-4, CH-4, or ACEA E7 performance
- Hydraulic systems or marine gearboxes where engine oils are specified

PERFORMANCE STANDARDS

- API CI-4 / CH-4
- ACEA E7
- Caterpillar ECF-2
- MAN 3275
- MB 228.3 (DTFR 15B110)

Product Features & Benefits

- **High TBN Reserve (15):** Delivers strong acid neutralization capacity, making it ideal for engines operating on high-sulfur diesel or under harsh marine conditions.
- **Superior Wear Protection:** Minimizes engine wear even under heavy loads and long operating hours.
- **Enhanced Oxidation Stability:** Maintains performance in prolonged high-temperature environments.
- **Excellent Detergency and Dispersancy:** Keeps pistons and internal components clean from soot, sludge, and deposits.
- **Corrosion and Rust Protection:** Formulated to protect against saltwater-induced corrosion and long idle periods.
- **Extended Drain Intervals:** Designed for long oil life and optimized maintenance schedules.
- **Outstanding All-Weather Performance:** Suitable for both cold starts and hot engine operations with stable viscosity behavior.

Recommended For

- Inboard and outboard 4-stroke marine engines requiring API CI-4 performance
- Marine diesel engines from Yanmar, Volvo Penta, Perkins, Cummins, Caterpillar, MAN, and others
- High-load engines operated in humid, corrosive, and saltwater environments

Typical Properties by Viscosity Grade

Property	Method	Unit	Typical Result
Appearance	Visual	-	Amber
Density @ 15°C	ASTM D4052	g/cm ³	0.875
Kinematic Viscosity @ 40°C	ASTM D445	mm ² /s	110.5
Kinematic Viscosity @ 100°C	ASTM D445	mm ² /s	14.8
Viscosity Index	ASTM D2270	-	145
Pour Point	ASTM D97	°C	-36
Flash Point (COC)	ASTM D92	°C	240
Total Base Number (TBN)	ASTM D2896	mg KOH/g	15.0
Sulfated Ash	ASTM D874	% wt	1.4
CCS @ -20°C	ASTM D5293	cP	6200



STORAGE & HANDLING

- Store in a covered, cool, and dry location.
- Protect from direct sunlight and extreme temperatures.
- Keep containers sealed when not in use.
- For best results, store drums horizontally to avoid moisture contamination.

Health, Safety, and Environment

- Always consult the Safety Data Sheet (SDS) before handling.
- Avoid prolonged skin contact with used oil.
- Do not dispose of used oil into drains, soil, or waterways. Return to authorized collection centers.

