



## PRODUCT DATA SHEET

### EKO MARINE 4T TECH 10W-40

Semi-synthetic lubricant for marine 4-stroke inboard and outboard gasoline engines

#### DESCRIPTION

EKO MARINE 4T TECH 10W-40 is a latest generation semi-synthetic lubricant, specially designed for 4-stroke marine gasoline engines of powerboats. Applications include fishing boats, tugboats, patrol boats and leisure boats.

EKO MARINE 4T TECH 10W-40 is engineered with high quality hydrotreated base oils of exceptional oxidation stability and very low volatility, and contains a special additive package to deliver maximum protection to the engine against wear and corrosion.

EKO MARINE 4T TECH 10W-40 is suitable for outboard, inboard and sterndrive engines. It meets NMMA FC-W and NMMA FC-W Catalyst Compatible specifications, so it is the right choice for all inboard and sterndrive engines, with or without catalytic converters.

Marine 4-stroke gasoline engines operate in a completely different environment and in different conditions compared to 4-stroke automotive gasoline engines. Boats are constantly exposed to humid air, and moisture absorbed by marine engines creates a very high risk of corrosion. Additionally, since water-cooled marine engines run at lower temperatures than air-cooled car engines, a high level of moisture remains in the engine, and wet air continues entering engine after shutting down as it cools. The high level of moisture may damage engine, particularly if it remains idle for long periods.

Another difference between marine engines and car engines is that marine engines operate in more difficult conditions than car engines - at higher speeds and under the constant loading created by water, which cause more strain on all the components of the engine. For all the above reasons, 4-stroke marine gasoline engines require different lubricants than lubricants for vehicle engines, with special additives, for extra protection and resistance.

#### SPECIFICATIONS

NMMA FC-W Catalyst Compatible, NMMA FC-W.

**Suitable for use:** API SM



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### APPLICATIONS

- Marine 4-stroke inboard, outboard and sterndrive (inboard/outboard) gasoline engines operating on powerboats.
- Suitable for all type of engines, equipped or not with catalytic converters.

### ADVANTAGES

- Maintains the engine clean and free of moisture and offers excellent protection to the metallic parts of the engine against corrosion.
- Exhibits excellent resistance to thermal degradation and shear, thus maintaining a strong oil film even in extreme conditions of high temperatures, high speeds and high loads and ensuring maximum protection of the engine and increase of engine lifespan.
- Protects and maintains the effectiveness of the exhaust after-treatment devices.
- The SAE 10W-40 viscosity grade of the lubricant provides easy and quick start-up of the engine and excellent low temperature performance.

### TYPICAL CHARACTERISTICS

Properties	Methods	Units	EKO MARINE 4T TECH 10W-40
SAE Viscosity Grade	-	-	10W-40
Density, 15°C	ASTM D4052	g/ml	0.859
Kinematic Viscosity, 100°C	ASTM D445	cSt	13.65
Kinematic Viscosity, 40°C	ASTM D445	cSt	86.78
Viscosity Index (VI)	ASTM D2270	-	160
CCS Viscosity, -25°C	ASTM D5293	cP	3780
Sulfated Ash	ASTM D874	% w/w	0.8
Flash Point, COC	ASTM D92	°C	232
Pour Point	ASTM D5950	°C	-36

### HEALTH AND SAFETY

Protect the environment while disposing of used product. Used lubricants should be collected at specific points to ensure they do not pollute the environment. Do not mix with solvents, brake fluids, antifreeze fluids and water, to allow for proper handling.

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This data sheet provides basic information on the product as at the date of drafting. For further information regarding applications, please contact EKO ABEE Technical Support, tel. +30 210 5509 511. Advice on safe handling is provided in the Safety Data Sheet.