



# OCEAN FS 2T BIO

## Description

OCEAN FS 2T BIO is a rapidly biodegradable, fully synthetic 2-stroke engine oil for all boat petrol engines that operate using the 2-stroke system. The use of the latest fully synthetic base oils and the additives formulated for this application ensure perfect lubrication, even under extremely difficult operating conditions.

The biological degradability of > 80% is satisfied as defined by standard CEC-L-33-A -93 or CEC-L-33-T- 82. The requirements of the American NMMA (National Marine Manufacturers Association) for the TC-W3 certificate are satisfied in full.

## Advantages

- only very small amounts required, mixing ratio 1:100 (1%) or in accordance with the manufacturer's specifications.
- over 80% biodegradable (CEC-L-33-A -93 or CEC-L-33-T-82)
- very little smoke and no odour emissions (low smoke)
- effective corrosion protection, even for salt water
- spark plugs, pistons and piston rings are always clean
- no formation of sticky and carbon residues in the exhaust
- superb thermal stability, even at very high engine speeds
- suitable for separate lubrication (injection) or mixing lubrication (pre-mix)
- excellent for engines with catalytic converters

## Field of application

For water-cooled 2-stroke petrol outboard engines in all performance classes. Suitable for both separate lubrication (injection) and for mixed lubrication (pre-mix).

## Spezifikationen

NMMA TC-W3  
ASTM TSC-4  
JASO FC

## Reference

Not suitable for 4-stroke engines or 2-stroke diesel engines.

## Technical data

Properties	Unit	Test according to	Values
Viscosity class		SAE J 1536	F/M 2
Colour		DIN ISO 2049	blue
Density at 20 °C	g/ml	ASTM D 4052	0.930
Viscosity at 40 °C	mm <sup>2</sup> /s	DIN 51562-1	49.0
Viscosity at 100 °C	mm <sup>2</sup> /s	DIN 51562-1	8.4
Viscosity index		DIN ISO 2909	147
Pourpoint	°C	ASTM D 5950	- 36

Water hazard class: WGK 1  
Disposal code: EWC 130 207

The above information is subject to change without prior notice, although they are in accordance with current standards. Performance characteristics indicated are based on usual tolerances which occur during measuring and production using the latest technology. A safety data sheet is available.

