



## RAVENOL Outboardoel 2T Fullsynth.

RAVENOL Outboardoel 2T Fullsynth. is high performance 2-stroke engine oil based on polyolesters with special esters and Polyisobutylene (PIB) and with an ash less additive package for optimum lubricity and excellent corrosion protection.

RAVENOL Outboardoel 2T Fullsynth. is especially designed for outboard engines with or without Direct Fuel Injection (DFI) Systems in fresh water cooled outboard engines with separate (Auto lube systems) or mixed lubrication.

RAVENOL Outboardoel 2T Fullsynth. meets the requirements of the National Marine Manufacturers Association NMMA TC-W3 (Yamaha CE 50S, Mercury).

### Application Notes

RAVENOL Outboardoel 2T Fullsynth. is recommended for "TC-W3" Fluids in all outboard engines according to the prescribed mixing ratio from the engine manufacturer. It can also be used for engines operating in seawater.

RAVENOL Outboardoel 2T Fullsynth. is recommended for use in 2-stroke outboard engines with or without Direct Fuel Injection (DFI) Systems. For example OptiMax (Mercury), E-TEC (BRP: Evinrude and Johnson), HPDI (Yamaha), TLDI (Tohatsu, Nissan Marine), DFI (Selva).

Typical mixing ratio: 1:100

Follow the manufacturers recommendations!

### Quality Classifications

RAVENOL Outboardoel 2T Fullsynth. is tried and tested for aggregates specifying:

#### Specifications

API TD

#### Approvals

NMMA TC-W3®, RL-90001G

#### Practice and tested in aggregates with filling

Yamaha, Suzuki, Tohatsu, Johnson, Evinrude, Mercury und Selva

### Characteristic

RAVENOL Outboardoel 2T Fullsynth. offers:

- An excellent corrosion protection in all oil-wetted engine parts
- Immediate, homogeneous mixture with the used fuel (including lead-free)
- An effective pressure and temperature resistant oil film
- An excellent anti-wear performance
- A clean burning with no deposits
- An excellent anti-wear performance
- Low coking
- High wear protection

Characteristics	Unit	Data	Audit
Colour		blue	visual
Density at 20°C	kg/m <sup>3</sup>	872	EN ISO 12185
Viscosity at 40°C	mm <sup>2</sup> /s	48,0	DIN 51 562
Viscosity at 100°C	mm <sup>2</sup> /s	8,0	DIN 51 562
Viscosity index VI		138	DIN ISO 2909
Pourpoint	°C	-21	DIN ISO 3016
Sulphated ash	%wt.	<0,04	DIN 51 575
TBN	mg KOH/g	2,4	-

All indicated data are approximate values and are subject to the commercial fluctuations.

All information correspond to the best of our knowledge to the actual situation of the cognitions and our development. Subject to alterations. All references made to DIN-norms are only for the description of the goods. There is no guarantee. In case there will be any problems please contact the technical service.

08.04.2016

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