

Product Data Sheet

Castrol Outboard 2T

High Quality Engine Oil for Outboards

Description

Castrol Outboard 2T is an ashless, self-mixing 2-stroke engine lubricant, specially formulated for use in water cooled two stroke marine outboard engines. Castrol Outboard 2T is certified NMMA TC-W3®.

The trend towards decreased oil/fuel ratios, increased power output and the adoption of unleaded petrol has resulted in a requirement for improved lubricant performance for outboard engines. The product is formulated with a Sulfated Ash level of less than 0.005%.

Application

Castrol Outboard 2T is recommended for all water cooled outboard engines including Force, Mariner, Johnson, Evinrude, Mercury, Chrysler, Suzuki, Tohatsu and Yamaha.

Castrol Outboard 2T may be used fuel to oil ratios of up to 100:1 (as specified by the engine manufacturer).

It is preferable to NOT mix Castrol Outboard 2T with any other oils, as this may not only compromise performance but it may cause serious damage to the outboard engine.

Do NOT use in 4-stroke engines. Always ensure that the correct 2-stroke engine oil (as specified by the engine manufacturer) is used by referring to the operator's handbook or the Castrol Lubrication Reference Guide.

Advantages

- The combination of specially selected base oils with the latest technology additives results in a superior product that is readily miscible with fuel
- Superb anti-wear properties to ensure excellent engine protection
- Exceptional overall engine cleanliness and reduced spark plug fouling
- Excellent corrosion and storage protection

Typical Characteristics

| Name | Method | Units | Outboard 2T |
|---------------------------|------------|-------|-------------|
| Density @ 15C, Relative | ASTM D4052 | g/ml | 0.870 |
| Viscosity, Kinematic 100C | ASTM D445 | mm²/s | 8.5 |
| Flash Point, PMCC | ASTM D93 | °C | 75 |
| Ash, Sulphated | ASTM D874 | % wt | <0.005 |
| Viscosity, Kinematic 40C | ASTM D445 | mm²/s | 52 |
| Viscosity Index | ASTM D2270 | None | 140 |

Product Performance Claims

NMMA TC-W3

Recommended Concentrations Oil / Fuel Mixing Guide

| | Fuel Volume (litres) | | | | | | |
|--|----------------------|-------|-------|-------|-------|-------|--|
| Fuel to Oil Ratio (volume of oil to add) | 1L | 5L | 10L | 20L | 50L | 100L | |
| 20:1 | 50mL | 250mL | 500mL | 1.0L | 2.5L | 5.0L | |
| 25:1 | 40mL | 200mL | 400mL | 800mL | 2.0L | 4.0L | |
| 30:1 | 30mL | 160mL | 330mL | 660mL | 1.7L | 3.3L | |
| 40:1 | 25mL | 125mL | 250mL | 500mL | 1.25L | 2.5L | |
| 50:1 | 20mL | 100mL | 200mL | 400mL | 1.0L | 2.0L | |
| 75:1 | 15mL | 70mL | 140mL | 270mL | 670mL | 1.35L | |
| 100:1 | 10mL | 50mL | 100mL | 200mL | 500mL | 1.0L | |

Additional Information

Castrol Outboard 2T exceeds the severe certification tests for TC-W3® as defined by the National Maritime Manufacturers' Association (NMMA) of the USA. The NMMA is the foremost globally recognised organisation for qualifying lubricants for marine outboard applications. TC-W3® Registration No. **RL-29067P**

The TC-W3® specification was introduced to overcome performance problems which occured in some applications when using lubricants designed to the former TC-WII® standard. These problems related to fuel lubricity and carbon build-up on pistons and rings. The TC-W3® specification has set significantly increased performance standards, resulting in improved lubricity, reduced ring sticking, lower piston deposits and varnish and improved corrosion resistance.

The improved lubricant performance levels assist in longer engine life, better power output over time and greater engine reliability. Castrol Outboard 2T exceeds all requirements of TC-W3® and is qualified for use in water cooled 2-stroke outboard engines operating under all conditions. Castrol Outboard 2T may also be recommended where previous specifications TC-2, TC-W and TC-WII® are nominated.

Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

Castrol Outboard 2T 28 Nov 2021

Castrol, the Castrol logo and related marks are trademarks of Castrol Limited, used under licence.

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, to the extent that it is permissible by law to exclude warranties and representations, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Material Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. Refer to the MSDS, available from our website for further information. No responsibility is taken by either Castrol Australia, BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.