



OUTBOARD MOTOR OIL

Introduction

Petro-Canada Outboard Motor Oil is a premium lubricant designed to give excellent performance in two-cycle engines used to power outboard motors. It is especially formulated for use in oil injected as well as pre-mixed gasoline/oil lubricated engines.

Outboard Motor Oil is formulated with the latest performance additives that give superior anti-scuff and anti-wear protection, internal cleanliness and long engine life. In addition, the ashless formula minimizes spark plug fouling and engine pre-ignition.

Certified by the National Marine Manufacturers Association (NMMA) under TC-W3® registration RL-00440K.

Features and Benefits

- Controls deposit formation/ring-sticking and prevents exhaust port plugging
- Gives superior anti-wear and anti-scuff protection
- Minimizes spark plug fouling and engine pre-ignition
- Provides excellent protection against rust and corrosion
- Formulated for oil injection as well as pre-mixed gasoline/oil lubricated engines
- Keeps smoke emissions low when used at recommended gasoline/oil ratios
- Dyed blue-green for easy detection of gasoline/oil mixtures

Applications

Petro-Canada Outboard Motor Oil is an ashless fluid designed for use in high performance, water-cooled, two-stroke cycle engines used to drive outboard motors. Outboard Motor Oil is certified by the NMMA as meeting their **TC-W3®**, **TC-WII®** or **TC-W®** service levels. It may be used in oil injection as well as pre-mixed gasoline/oil lubricated engines at all gasoline/oil ratios specified by the manufacturers.

Engine manufacturers recommending TC-W3® oils include:

- Evinrude (Bombardier)
- Johnson (Bombardier)
- Mercury/Mariner
- Nissan
- Sea King
- Sears/Gamefisher
- Suzuki
- Yamaha

Outboard Motor Oil has been formulated to give excellent protection against rust and corrosion and strongly resists the formation of water gels, a common cause of filter plugging in outboard engines.

Quick Mix Chart

RATIO GASOLINE TO OIL	MILLILITRES (mL) OIL ADDED TO LITRES OF GASOLINE		
	5 LITRES	10 LITRES	25 LITRES
16:1	315	625	1550
24:1	210	420	1050
32:1	155	315	800
50:1	100	200	500
100:1	50	100	250

What is the HT difference?

Petro-Canada starts with the HT purity process to produce water-white, 99.9% pure base oils. The result is a range of lubricants, specialty fluids and greases that deliver maximum performance for our customers.



Typical Performance Data

PROPERTY	TEST METHOD	OUTBOARD MOTOR OIL
Performance Level	SAE J2116	NMMA TC-W3®
Density @ 15°C/59°F, Kg/L	ASTM D4052	0.868
Colour		Blue / Green
Kinematic Viscosity cSt @ 40°C/SUS @ 100°F cSt @ 100°C/SUS @ 210°F	ASTM D445 / D2161	55.6 / 285 8.8 / 56
Brookfield Viscosity, cP @ -25°C/-13°F	ASTM D2983	5,910
Pour Point, °C/°F	ASTM D5950	-48 / -54
Sulphated Ash, wt %	ASTM D874	<0.001
SAE Fluidity/Miscibility Number	SAE J1536-01	F / M 3
Base Number	ASTM D2896	7
Exhaust System Blocking (Index)	JASO M343	>45
Lubricity (Index)	JASO M340	>95
Initial Torque (Index)	JASO M340	>98
Detergency (Index)	JASO M341	>85

The values quoted above are typical of normal production. They do not constitute a specification.

Health and Safety

To obtain Material Safety Data Sheets, contact one of Petro-Canada's TechData Info Lines.

TechData Info Lines

If you are an existing customer looking to place an order, please call a Customer Order Management Representative at:

Canada (English) Phone 1-800-268-5850
(French) Phone 1-800-576-1686
United States Phone 1-877-730-2369
Latin America/Europe/Asia Phone +1-866-957-4444

You can also e-mail us at lubecsr@suncor.com



If you would like to become a Petro-Canada lubricants customer and require more information about specialty fluids, oils and greases that can help maximize your equipment performance, savings and productivity, please contact us at:

North America Phone 1-866-335-3369
Europe Phone +44 (0) 121-781-7264
Germany Phone +49 (0) 201-726-2913
China Phone +86 (21) 6362-0066

Visit us on the web at lubricants.petro-canada.com