



## **PENNZOIL MARINE<sup>®</sup> PREMIUM PLUS OUTBOARD TWO-CYCLE OIL**

**NMMA Certified TC-W3<sup>®</sup>**

### **PRODUCT DESCRIPTION**

PENNZOIL MARINE<sup>®</sup> PREMIUM PLUS OUTBOARD TWO-CYCLE OIL is a premium “Synthetic Blend” certified by the National Marine Manufacturer's Association (NMMA) as an approved NMMA TC-W3<sup>®</sup> lubricant and is specifically designed for exceptional performance in marine applications.

PENNZOIL MARINE<sup>®</sup> PREMIUM PLUS OUTBOARD TWO-CYCLE OIL is a synthetic blend product formulated with a higher additive concentration than required for NMMA TC-W3<sup>®</sup> certification. This extra level of performance protects outboard engines under the most severe operating conditions.

PENNZOIL MARINE<sup>®</sup> PREMIUM PLUS OUTBOARD TWO-CYCLE OIL contains only ashless components which helps prevent any lubricant related preignition and spark plug fouling. The ashless additives also help protect against piston and combustion chamber deposits, rust, and corrosion. It's “anti-gel” properties help resist gel formation due to water or other contamination. The special base stocks used resist piston and cylinder wall scuffing.

### **APPLICATION**

PENNZOIL MARINE<sup>®</sup> PREMIUM PLUS OUTBOARD TWO-CYCLE OIL exceeds the requirements of the NMMA TC-W3<sup>®</sup> standard. It is recommended for and meets the warranty requirements of outboard engines produced by the following manufacturers:

|                    |          |          |          |
|--------------------|----------|----------|----------|
| *Evinrude          | *Johnson | *Mercury | *Mariner |
| *U.S. Marine/Force | *Sears   | *Suzuki  | *Yamaha  |

PENNZOIL MARINE<sup>®</sup> PREMIUM PLUS OUTBOARD TWO-CYCLE OIL mixes easily with gasoline, and is dyed blue to allow for easy detection. Follow engine manufacturer's recommended fuel/oil ratio for premix systems. It is also recommended for oil injection systems.

PENNZOIL MARINE<sup>®</sup> PREMIUM PLUS OUTBOARD TWO-CYCLE OIL may also be used in other applications calling for NMMA TC-W<sup>®</sup>, TC-WII<sup>®</sup>, or TC-W3<sup>®</sup> approved oils.

### **BENEFITS**

- Synthetic Blend for high performance applications
- Maximum additive treatment, including increased detergency over the TC-W3<sup>®</sup> formulation. Helps protect engines against failures due to scuffing, ring sticking, port deposits, bearing failures and plug fouling
- Exceeds NFPA Code 30 Class IIIB liquids flash point limits. Flash point exceeds 200°F and requires no special warehousing
- NMMA TC-W3<sup>®</sup> certified. Exceeds warranty requirements for all outboard engine manufacturers
- Mixes easily with fuel for premix applications
- Excellent flow properties for oil injection systems

| Ratio Gas to Oil | Ounces of Oil to be added |       |       |        | Milliliters of Oil to be added |          |           |
|------------------|---------------------------|-------|-------|--------|--------------------------------|----------|-----------|
|                  | 1 Gal                     | 2 Gal | 5 Gal | 10 Gal | 1 Liter                        | 5 Liters | 10 Liters |
| 16:1             | 8                         | 16    | 40    | 80     | 62.5                           | 312.5    | 625       |
| 32:1             | 4                         | 8     | 20    | 40     | 31.25                          | 156.25   | 312.5     |
| 40:1             | 3.2                       | 6.4   | 16    | 32     | 25                             | 125      | 250       |
| 50:1             | 2.6                       | 5.2   | 12.8  | 25.6   | 20                             | 100      | 200       |
| 100:1            | 1.3                       | 2.6   | 6.4   | 12.8   | 10                             | 50       | 100       |

**TYPICAL PHYSICAL AND CHEMICAL PROPERTIES  
PENNZOIL MARINE<sup>®</sup> PREMIUM PLUS OUTBOARD TWO-CYCLE OIL**

| TEST                            | METHOD      | TYPICAL RESULTS |
|---------------------------------|-------------|-----------------|
| Gravity, API                    | ASTM D-4052 | 29.8            |
| Pounds per Gallon               | ASTM D-4052 | 7.31            |
| Flash Point, °C(°F)             | ASTM D-93   | 97(207)         |
| Viscosity                       |             |                 |
| @ 40°C, cSt                     | ASTM D-445  | 59              |
| @ 100°C, cSt                    | ASTM D-445  | 9.37            |
| Viscosity Index                 | ASTM D-2270 | 133             |
| Brookfield Viscosity @-25°C, cP | ASTM D-2983 | 6300            |
| Pour Point, °C(°F)              | ASTM D-97   | -43(-45)        |
| Material Number                 |             |                 |
| Bulk                            |             | 3843            |