



## **Gulf Green 3000**

### **Biodegradable, Synthetic 2-Cycle Outboard Engine Oil**

#### **Product Description**

**Gulf Green 3000** is biodegradable, synthetic, high flash, ashless, 2-Cycle engine oil developed to meet the most critical requirements of the latest outboard and snow mobile engines. It is designed for the harsh operating conditions of marine environment and exceeds the stringent performance requirements of the latest National Marine Manufacturers Association's specification NMMA TC-W3®. It is certified by NMMA against their latest specification, NMMA TC-W3® (certification number- RL82008K). The modern ashless additive technology used in this oil along with synthetic esters provides excellent lubricity and protection against wear & rust.

#### **Features & Benefits**

- The latest additive technology helps in protecting the piston from scuffing, ensuring cleaner engines and minimising combustion chamber deposits with negligible port clogging
- The special ashless detergents protect against piston ring sticking, spark plug fouling and preignition
- Special rust inhibitors guard against the formation of rust & corrosion even in marine salt water environment
- Being biodegradable this oil helps in protecting aquatic life
- Ensures easy mixing and forms stable mixtures with gasoline even at low ambient temperatures

#### **Applications**

- Recommended for and meets the warranty requirements of the latest high output 2-Cycle outboard engines requiring NMMA TC-W3® quality oils
- Recommended for those special applications where biodegradable oils meeting NMMA TC-W3® specification are required.
- Also recommended for 2-Cycle, water cooled outboard engines where NMMA TC-W2®, NMMA TC-W® or other general purpose lubricants are required
- It is suitable for adding as a premix with gasoline or injecting through variable ratio oil injection systems

#### **Specifications, Approvals & Typical Properties**

| <b>Has the following Approvals</b>        |                    |                       |
|---|--------------------|-----------------------|
| NMMA TC-W3® Certification number RL82008K |                    |                       |
| <b>Typical Properties</b>                 |                    |                       |
| <b>Test Parameters</b>                    | <b>ASTM Method</b> | <b>Typical Values</b> |
| Viscosity @ 100 °C, cSt                   | D445               | 7.9                   |
| Viscosity Index                           | D 2270             | 150                   |
| Flash Point, °C                           | D 92               | 114                   |
| Pour Point, °C                            | D 97               | -42                   |
| TBN, mg KOH/g                             | D 2896             | 8.5                   |
| Density @ 15°C, Kg/l                      | D 1298             | 0.961                 |

April 2008

Properties mentioned above are typical only and minor variations, which do not affect the product performances, are to be expected in normal manufacturing. The above information is based on past history of the grade only and must not be construed as a guarantee of performance. Follow equipment manufacturer's recommendations for performance level and viscosity grade. The Material Safety Data Sheet for this product is available from your nearest Gulf Distributor.

**Gulf Oil International**

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