

# DOMINATOR® Synthetic 2-Cycle Racing Oil

Racers can't win what they don't finish. That's why AMSOIL formulators built DOMINATOR® 2-Stroke Racing Oil. This complex blend of oils and additives directly addresses the heat, pressure and friction of race-engineered engines. These engines operate on the edge, yet engine reliability is critical. DOMINATOR does an outstanding job protecting high-performance engines. It adds durability that professional racing teams depend on and delivers confidence so engines can be pushed to the limit.

# **Excellent Lubricity and Film Strength**

High-performance and race-designed two-stroke engines operate under severe conditions. They are modified for higher compression ratios, higher rpm and leaner combustion, all of which increase heat and pressure. High heat can quickly burn off light oils and cause rapid piston expansion, decreasing piston-to-cylinder wall clearances and increasing the likelihood of piston scuffing and seizure. High pressure can exceed the film strength of low-viscosity oils, which promotes crankshaft bearing wear and pitting.

DOMINATOR is purpose-built for outstanding film strength and lubricity. It is engineered with carefully selected, higher-viscosity synthetic base oils to withstand the high heat and pressure common to high-performance and racing applications. DOMINATOR's anti-friction chemistry is race-proven to provide an extra measure of protection against piston scuffing and bearing wear. See teardown photos on reverse.

## **Outstanding Cleanliness**

The oil and fuel burned in the two-cycle combustion process leave destructive deposits on the pistons, rings and in the combustion chamber. Excessive deposits can lead to catastrophic engine problems, including ring sticking, exhaust port blocking and pre-ignition.

AMSOIL DOMINATOR is formulated with clean-burning synthetic base oils and powerful high-temperature detergent additives for exceptional deposit control. It helps prevent the power-robbing carbon deposits that cause ring sticking, exhaust port blocking and pre-ignition. AMSOIL DOMINATOR is optimized for severe service.



**APITC** 

#### **Race-Proven Benefits**

- Excellent film strength for high-heat, high-rpm motors
- Anti-friction formula for maximum power
- Burns clean; helps prevent ring sticking and plug fouling
- Protects coated and noncoated racing pistons

## TYPICAL TECHNICAL PROPERTIES

# DOMINATOR® Synthetic 2-Stroke Racing Oil (TDR)

Kinematic Viscosity @ 100°C, cSt (ASTM D445)	7.2
Kinematic Viscosity @ 40°C, cSt (ASTM D445)	36.5
Viscosity Index (ASTM D2270)	165

Pour Point °C (°F) (ASTM D97)	51 (-60)
Flash Point °C (°F) (ASTM D92)	. 102 (215.6)
Fire Point °C (°F) (ASTM D92)	. 102 (215.6)

#### RACING IS RESEARCH™

AMSOIL disassembled the Rotax® motor from Scheuring Speed Sports' Ski-Doo® race snowmobile ridden by Robbie Malinoski during the 2010/2011 professional snocross tour. Both pistons revealed minimal wear and were suitable for continued use. AMSOIL DOMINATOR delivered outstanding protection for Malinoski's Ski-Doo in the most severe environment.







**PISTON 1** Exhaust Side



PISTON 2 Intake Side



PISTON 2 Exhaust Side

## **APPLICATIONS**

DOMINATOR® is recommended for use in high-performance stock or modified two-cycle engines, including air- or liquid-cooled snowmobiles, personal watercraft, motorcycles (moto X), ATVs, go-carts and outboard motors\*. Good for use with coated or non-coated pistons, high-octane racing fuels and exhaust power valves. Compatible with most other two-stroke oils; however, mixing oils should be minimized.

Use in oil-injected and pre-mix applications where API TC oils are specified. In pre-mix applications, DOMINATOR delivers outstanding protection at 50:1 (2.6 oz. oil per U.S. gallon of gas), although many racers modify the mix ratio to suit their setup. Not suitable for use with alcohol or nitro-methane fuels.

#### **AMSOIL PRODUCT WARRANTY**

AMSOIL products are backed by a Limited Liability Warranty. For complete information visit www.amsoil.com/warranty.aspx.

<sup>\*</sup> Not suitable for long-term use in outboard motors as a TC-W3-type oil, although excellent as a race oil for short-term use where motors are periodically inspected.



Jeff Fisher 866-292-4700 www.SyntheticOils.us AMSOIL products and Dealership information are available from your local full-service AMSOIL Dealer.