



The First in Synthetics®

## DOMINATOR® Synthetic 2-Cycle Racing Oil

Racers can't win what they don't finish. That's why AMSOIL formulators built DOMINATOR® 2-Cycle 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-cycle 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.

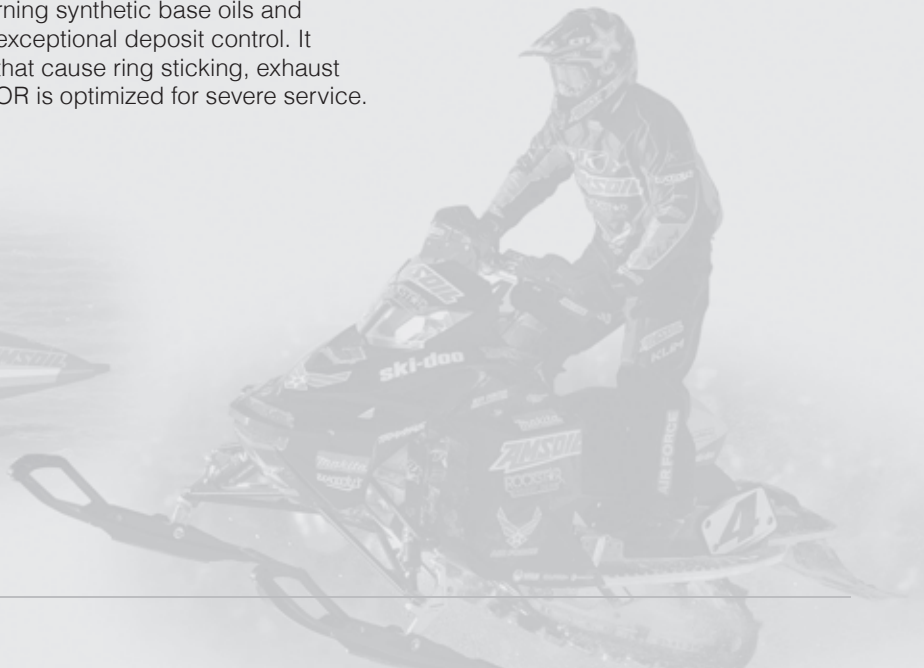
AMSOIL DOMINATOR is formulated with clean-burning synthetic base oils and powerful high-temperature detergent additives for exceptional deposit control. It helps prevent the power-robbing carbon deposits that cause ring sticking, exhaust port blocking and pre-ignition. AMSOIL DOMINATOR is optimized for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



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## TYPICAL TECHNICAL PROPERTIES

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

Kinematic Viscosity @ 100°C, cSt (ASTM D 445) . . . . . 7.5  
Kinematic Viscosity @ 40°C, cSt (ASTM D 445) . . . . . 41.4  
Viscosity Index (ASTM D 2270) . . . . . 151

Pour Point °C (°F) (ASTM D 97) . . . . . -51 (-60)  
Flash Point °C (°F) (ASTM D 92) . . . . . 90 (194)  
Fire Point °C (°F) (ASTM D 92) . . . . . 90 (194)

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## 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**  
Intake Side



**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 motors, 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-cycle 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 pre-mix ratios (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.

\* 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.



AMSOIL products and Dealership information are available from your local AMSOIL Dealer.