



*The First in Synthetics*®

## Saber Professional (ATP) & Outboard (ATO) Synthetic 100:1 Pre-Mix 2-Cycle Oils

AMSOIL Saber Professional (ATP) and Outboard (ATO) Synthetic 100:1 Pre-Mix 2-Cycle Oils are formulated with exclusive AMSOIL synthetic base oils and premium additives. Designed for lean mix ratios in two-cycle motors, Saber 2-Cycle Oils have excellent lubricity and cleanliness properties to control friction and prevent wear, plug fouling, ring sticking and exhaust port blocking. AMSOIL Synthetic 100:1 2-Cycle Oils have been protecting and providing improved performance in two-cycle motors since 1973.

### *Saber Professional*

Saber Professional (ATP) is specifically designed for small engines including, but not limited to, chain saws, lawn equipment, blowers, chop saws, pumps, scooters and go-carts. It is available in a 3.5-oz. bilingual (English/Spanish) container which is ideal for treating the 2 – 2.5-gallon cans of gas commonly used for storing mixed gas on the job. Saber Professional is also very good for use in motorcycles, snowmobiles, ATVs, jet boats and personal watercraft. Saber Professional is formulated with high temperature detergent additives to prevent hard carbon deposits from forming in these hot operating motors. Saber Professional is “smokeless” and delivers fewer emissions at 100:1 mix ratios than oils mixed at 50:1. Equipment operators subjected to smoke and fumes will benefit from these low emission properties. Because one mix ratio satisfies multiple pieces of equipment, Saber Professional eliminates mix ratio confusion. Saber Professional is recommended for pre-mix where ISO-L-EGD, JASO FD or API TC is specified.



### *Saber Outboard*

Saber Outboard (ATO) is specifically designed for outboard motors. It is also very good for personal watercraft, jet boats, motorcycles, snowmobiles and ATVs. Saber Outboard contains a heavy dose of lower temperature dispersant additives that excel at preventing varnish and deposits from forming in water-cooled motors. Saber Outboard is a very low smoke, low odor, low toxicity product that produces fewer emissions at 100:1 mix ratios than oils mixed at 50:1. It is formulated to prevent “oil loading” and plug fouling for rapid throttle response, making it ideal for trolling motors. Operators and the environment benefit from the use of Saber Outboard. It is recommended for pre-mix use where TC-W3 or API TC is specified.



## TYPICAL TECHNICAL PROPERTIES

### Saber Synthetic 100:1 Pre-Mix 2-Cycle Oils (ATP & ATO)

	ATP	ATO		ATP	ATO
Kinematic Viscosity @ 100°C, cSt (ASTM D-445)	13.5	17.9	Pour Point, °C (°F) (ASTM D-97)	-36 (-33)	-33 (-27)
Kinematic Viscosity @ 40°C, cSt (ASTM D-445)	99	141.2	Flash Point, °C (°F) (ASTM D-92)	114 (237)	120 (248)
Viscosity Index (ASTM D-2270)	136	141	Fire Point, °C (°F) (ASTM D-92)	114 (237)	138 (280)

### APPLICATIONS

AMSOIL Saber 100:1 2-Cycle Oils are recommended for 100:1 mix ratios in normal service. Richer mix ratios may be used where desired.

2.6 oz.	per 1 U.S. gallon	= 50:1
8 oz.	per 5 U.S. gallons	= 80:1
1.3 oz.	per 1 U.S. gallon	= 100:1
8 oz.	per 6 U.S. gallons	= 100:1

### AMSOIL 2-CYCLE OIL RECOMMENDATIONS

AMSOIL 2-Cycle Oil	Outboard*	Snowmobile*, Motorcycle* & ATV*	Personal Watercraft* & Jet Boat*	Chain Saw, Chop Saw & Pump	Weed Eater, Blower & Lawn Mower	Moped, Scooter & Go-Cart
<b>HP Injector (HPI) TC-W3, API TC</b> (Injection or 50:1 Pre-Mix)	Excellent	Very Good	Very Good	Not Recommended	Not Recommended	Not Recommended
<b>INTERCEPTOR (AIT) API TC, JASO FC</b>	Not Recommended	Excellent	Excellent	Good	Good	Good
<b>DOMINATOR (TDR) API TC, JASO FC</b>	Racing (1)	Racing (2)	Racing (2)	Very Good	Very Good	Very Good
<b>Saber Professional 100:1 Pre-Mix (ATP) ISO-L-EGD, JASO FD, API TC</b>	Not Recommended	Very Good Pre-Mix Only	Very Good Pre-Mix Only	Excellent	Excellent	Excellent
<b>Saber Outboard 100:1 Pre-Mix (ATO) TC-W3, API TC</b>	Excellent Pre-Mix Only	Very Good Pre-Mix Only	Very Good Pre-Mix Only	Not Recommended	Not Recommended	Not Recommended

Equipment manufacturers and motor builders have redesigned two-cycle motors to reduce emissions and increase fuel economy. These changes have increased operating temperatures, reduced oil consumption and incorporated direct fuel injection and exhaust power valves. AMSOIL 2-Cycle Oils are designed to maximize performance in all types of engine designs and are optimized for select applications.

Even though AMSOIL 2-Cycle Oils have been optimized for specific applications, they are multi-functional and recommended for use in many areas. The chart rates each oil's performance abilities per application as follows:

**Excellent:** The primary recommendation for the oil. The oil is specifically designed for the operating conditions of the motors in these markets. There is only one "Excellent" recommendation per category.

**Very Good:** A main recommendation for the oil. Identifies an oil that is very good for the operating conditions of these motors.

**Good:** A secondary recommendation for an oil. The oil was not specifically designed for these applications. However, the chemistry in the oil is suited to the operating conditions of these motors.

**Not Recommended:** Identifies applications where the product was not intended for use.

**Racing:** (1) Not recommended 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.  
(2) Excellent for racing or modified motors. Very good for recreational use.

\*Recommended for all direct fuel injected (DFI), electronic fuel injected (EFI) and carbureted motors. Outboard motors include Mercury® and Optimax®, Johnson® & Evinrude® FICHT® & E-TEC™, Yamaha® HPDI, Nissan® & Tohatsu® TLDI®.

**DANGER:** Harmful or fatal if swallowed. Contains synthetic lubricant and petroleum distillates. If swallowed, do not induce vomiting. Contact a physician immediately. Avoid frequent or prolonged skin contact. Wash skin thoroughly with soap and water after handling. Avoid eye contact. Flush eyes with water for 15 minutes in case of contact. **KEEP OUT OF REACH OF CHILDREN.**

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

