



The First in Synthetics®

Saber Professional & Outboard Synthetic 100:1 Pre-Mix 2-Cycle Oils

AMSOIL Saber Professional (ATP) and Saber 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 help prevent wear, plug fouling, ring sticking and exhaust port blocking. Saber 2-Cycle Oils also feature an anti-rust formulation to counteract the damp environments often encountered in two-cycle applications. AMSOIL Synthetic 100:1 2-Cycle Oils have been providing improved performance and protection in two-cycle motors since 1973.

Saber Professional

Saber Professional (ATP) is specifically designed for small engines including, but not limited to, chainsaws, 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 gas cans commonly used for storing mixed gas on the job. Saber Professional also works well in motorcycles, snowmobiles, ATVs, jet boats and personal watercraft. Saber Professional is formulated with high-temperature detergent additives to help 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

Specifically designed for outboard motors, Saber Outboard (ATO) contains a heavy dose of low-temperature dispersant additives that excel at reducing varnish and carbon deposit formation in water-cooled motors. Saber Outboard also performs well in personal watercraft, jet boats, motorcycles, snowmobiles and ATVs. Its low-smoke, low-odor, low-toxicity properties produce fewer emissions at 100:1 mix ratios than oils mixed at 50:1, benefitting operators and the environment. Saber Outboard is formulated to prevent “oil loading” and plug fouling for rapid throttle response, making it ideal for trolling motors. 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
hp Injector (HPI) TC-W3, API TC (Injection or 50:1 Pre-Mix)	Excellent (4) (5)	Very Good	Very Good	Not Recommended	Not Recommended	Not Recommended
INTERCEPTOR (AIT) API TC, JASO FC (Injection or 50:1 Pre-Mix)	Not Recommended	Excellent (4)	Excellent (3) (4)	Good	Good	Good
DOMINATOR (TDR) API TC, JASO FC (Injection or 50:1 Pre-Mix)	Racing (1)	Racing (2)	Racing (2) (3)	Very Good	Very Good	Very Good
Saber Professional 100:1 Pre-Mix (ATP) ISO-L-EGD, JASO FD, API TC	Not Recommended	Very Good Pre-Mix Only	Very Good Pre-Mix Only (3)	Excellent	Excellent	Excellent
Saber Outboard 100:1 Pre-Mix (ATO) TC-W3, API TC	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.

- Notes:**
- (1) Not recommended for long-term use in outboard motors as a TC-W3 type oil, although excellent as a racing oil for short term use where motors are periodically inspected.
 - (2) Excellent for racing or modified motors. Very good for recreational use.
 - (3) For applications calling for a TC-W3 product use the recommendations listed under Outboards.
 - (4) Recommended for all direct fuel injected (DFI), electronic fuel injected (EFI) and carbureted motors.
 - (5) Includes Mercury® Optimax®, Johnson® & Evinrude® FICHT® & E-TEC™, Yamaha® HPDI, Nissan® & Tohatsu® TLDI®.

DANGER: Harmful or fatal if swallowed. Contains synthetic lubricant and petroleum distillates (solvent). 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.

