

# 100% Synthetic Small-Engine Oil <u>COMMERCIAL-GRADE</u>

Engine dependability is vital to running a profitable business, yet most small-engine oils we've tested are nothing more than re-labeled automotive oils, which are formulated with fuel economy in mind, not durability. That won't cut it. Compared to liquid-cooled automotive engines, small engines run hotter; operate under constant load; generate more oil-damaging contaminants; suffer from neglected maintenance and are exposed to dirt, rain, snow and other extremes. Simply put, they're far tougher on oil that most people think.

AMSOIL Synthetic Small-Engine Oil isn't merely a re-badged automotive oil. Instead, we designed it from the ground up specifically for small-engine dependability. You can rest assured your engines are protected even during periods of extended use when there's no time for scheduled maintenance. It's built to solve the problems that plague small engines, including wear, power loss, oil consumption, stuck rings and valves, and harmful carbon deposits. It helps landscapers, contractors and other professionals get more work done and save money.

#### **Excellent Wear Protection**

AMSOIL Synthetic Small-Engine Oil is a shear-stable, high-film-strength formulation fortified with a heavy dose of anti-wear additives. It does not thin out due to mechanical shear, ensuring a thick lubricating film. It forms a durable barrier that protects against metal-to-metal contact.

#### **Reduces Oil Consumption**

In lab testing 10W-30 Synthetic Small-Engine Oil reduced oil consumption 61 percent compared to three leading 10W-30/SAE 30 motor oils\*\*. Its heat-resistant synthetic base oils provide low volatility, excellent viscosity stability and strong oxidation resistance. Engines run longer between top-offs, providing peace of mind they won't fail due to oil starvation and will run dependably in the harshest conditions.

#### **Formulated for Power**

Engine wear, carbon deposits, valve sticking and piston-ring sticking reduce engine power. Synthetic Small-Engine Oil prevents ring and valve sticking while helping eliminate carbon deposits from forming. As a result, engines produce maximum power throughout their service lives, helping you get more work done.

#### **Extreme-Temperature Performance**

Synthetic Small-Engine Oil's saturated molecular structure offers outstanding extremeheat resistance. In addition, we've fortified the oil with potent anti-oxidant additives that provide further resistance to damaging heat. Its powerful detergent additives fight carbon, varnish and sludge to maximize engine life. In extreme cold, the oil's naturally high viscosity index and lack of paraffins (waxes) ensure it remains fluid and flows quickly, providing easier cold-weather starts and fast startup lubrication for reduced wear.



- Extended drain intervals
- Helps extend engine life
- Rust-inhibited

#### Reduces Deposits & Preserves Power



The piston and rings are virtually free of deposits and wear after 500 hours of severe-service testing in the Kawasaki\* FX 730 V engine.

\*\*Based on 125-hour lab tests of small engines using AMSOIL 10W-30 Synthetic Small-Engine Oil and three leading 10W-30/SAE 30 motor oils. \*All trademarked names and images are the property of their respective owners and may be registered marks in some countries. No affiliation or endorsement claim, express or implied, is made by their use. All products advertised here are developed by AMSOIL for use in the applications shown.

## TYPICAL TECHNICAL PROPERTIES AMSOIL Synthetic Small-Engine Oil

	5W-30 (AES)	10W-30 (ASE)	10W-40 (ASF)
Kinematic Viscosity @ 100°C, cSt (ASTM D445)	10.8	10.3	14.5
Kinematic Viscosity @ 40°C, cSt (ASTM D445)	60.4	66.8	96.6
Viscosity Index (ASTM D2270)	171	141	156
CCS Viscosity, cP (ASTM D5293)	4355 (-30)	5968 (-25)	6057 (-25)
Pour Point °C (°F) (ASTM D97)	44 (-47)	-40 (-40)	-39 (-38)
Flash Point °C (°F) (ASTM D92)	238 (460)	246 (475)	232 (450)
Fire Point °C (°F) (ASTM D92)	246 (475)	264 (507)	252 (486)
Four-Ball Wear Test (ASTM D4172B @ 40 kg, 75°C, 1200 rpm, 1 hr), Scar, mm	0.47	0.45	0.45
NOACK Volatility, % weight loss (ASTM D5800)	7.9	4.0	3.7
High-Temperature/High-Shear Viscosity (ASTM D4683 @ 150°C, 1.0 X 10 <sup>6</sup> s1), cP.	3.3	3.3	4.4
Total Base Number	8.5	8.5	8.5

## **APPLICATIONS**

AMSOIL Synthetic Small-Engine Oil is multifunctional and can be used in gasoline engines, off-road diesel engines and certain transmissions. It doesn't contain friction modifiers and meets JASO wet-clutch standards. It increases convenience and helps prevent misapplication.

Use the appropriate viscosity of Synthetic Small-Engine Oil in applications that require any of the following specifications:

- API SL, SJ, SH, SG...(Gasoline)
- API CD, CF (Diesel)
- JASO MA/MA2 (Wet Clutch)

Use **5W-30 Synthetic Small-Engine Oil** in small engines found in (not limited to) snowblowers, generators, power washers and other equipment that requires SAE 30 or 5W-30 motor oil, including those made by Briggs & Stratton,\* Honda,\* Kohler,\* Champion,\* Generac,\* Toro,\* Ariens,\* Troy Bilt,\* John Deere,\* MTD\* and Husgvarna\*.

Use **10W-30 Synthetic Small-Engine Oil** in small engines found in (not limited to) mowers (zero-turn, riding, stand-on, push), generators, power washers and other equipment that requires SAE 30 or 10W-30 motor oil, including those made by Briggs & Stratton, Honda, Kubota\*, Kawasaki\*, Kohler, Tecumseh\*, Robin\*, Onan\*, Wisconsin\*, Powertrain\*, Yanmar\*, Linamar\* and Vanguard\*.

Use **10W-40 Synthetic Small-Engine Oil** in small engines found in (not limited to) mowers (zero-turn, riding, stand-on, push), generators, power washers and other equipment that requires SAE 10W-40 or 15W-40 motor oil, including those made by Kubota, Kawasaki, Robin, Onan, Linamar and Vanguard.

Equipment types include maintenance equipment, tractors, lawn and garden equipment, compactors, pumps, light towers, log splitters, welders, cement mixers and trowels, skid-steers, excavators, rototillers and compressors.

## COMPATIBILITY

AMSOIL Synthetic Small-Engine Oil is compatible with other synthetic and conventional motor oils. Adding other oils, however, will shorten the life expectancy of AMSOIL motor oils and reduce their performance benefits. AMSOIL does not support extended drain intervals where oils have been mixed.

Aftermarket oil additives are **not recommended** for use with AMSOIL Synthetic Small-Engine Oil.

## SERVICE LIFE

AMSOIL Synthetic Small-Engine Oil is a long-life formulation that has repeatedly demonstrated its ability to safely exceed OEM drain intervals in the toughest conditions. Extensive severe-service testing proves its ability to provide service life of up to 200 hours/ one year, whichever comes first. It provides an extra measure of protection when equipment goes longer between oil changes than is recommended by the OEM.

### WARRANTY SECURE

AMSOIL Synthetic Small-Engine Oil is Warranty Secure, keeping your factory warranty intact. AMSOIL Synthetic Small-Engine Oil is a high-performance replacement for vehicle manufacturer-



branded products and is also backed by the AMSOIL Limited Warranty. For details, visit www.amsoil.com/warrantysecure.

### **HEALTH & SAFETY**

This product is not expected to cause health concerns when used for the intended applications and according to the recommendations in the Safety Data Sheet (SDS). An SDS is available via the Internet at www.amsoil.com or upon request at (715) 392-7101. **Keep Out of Reach of Children.** Recycle used oil and bottle.

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