DATA BULLETIN

Formula 4-Stroke® 10W-30/SAE 30 Synthetic Small Engine Oil

Commercial-Grade Synthetic Oil for Compact Gasoline and Diesel Engines

AMSOIL Formula 4-Stroke Synthetic Small Engine Oil is a robust formulation designed for hot-temperature, severe-service operation of small engines where routine maintenance is often difficult or infrequent. It is formulated with premium synthetic base oils that exceed both 10W-30 multi-grade and SAE 30 straight-grade viscosity requirements. Unlike conventional SAE 30 motor oils, AMSOIL Small Engine Oil has a naturally high viscosity index and does not contain paraffin (wax). It has a -40°F pour point and qualifies for SAE 10W, making it an "all-season," multi-grade lubricant with a wide operating temperature range. As an SAE 30 weight motor oil, AMSOIL Small Engine Oil provides outstanding protection for hot-operating engines. Formula 4-Stroke Small Engine Oil is a commercial-grade lubricant that helps improve productivity and reduce maintenance costs through superior engine protection.

Resists Heat and Reduces Oil Consumption

AMSOIL Formula 4-Stroke Small Engine Oil is engineered to withstand the high temperatures of hard-working engines. It effectively resists oxidation and oil vaporization to control oil thickening and reduce oil consumption. AMSOIL Small Engine Oil lasts longer in service than conventional oils and keeps engines clean for peak operating efficiency.

Excellent for Transmission Systems

AMSOIL Small Engine Oil is a shear-stable formulation that contains no friction modifiers. It protects gears and bearings during high-demand, commercial-duty service and resists breakdown during rigorous mechanical activity, making it ideal for hydraulic or hydrostatic systems and chaincases. Its wet-clutch compatibility helps prevent clutch slippage in commercial or recreational transmissions.

Superior Protection

AMSOIL Formula 4-Stroke Small Engine Oil is formulated with high levels of premium anti-wear and detergent additive technology. It provides severe-service protection of pistons, bearings and gears and effectively neutralizes acids from combustion by-products common to small engines. Anti-rust additives further protect equipment during storage or infrequent use.

TYPICAL TECHNICAL PROPERTIES

AMSOIL Formula 4-Stroke® Synthetic Small Engine Oil (ASE)

Kinematic Viscosity @ 100°C, cSt (ASTM D445)	10.3
Kinematic Viscosity @ 40°C, cSt (ASTM D445)	66.8
Viscosity Index (ASTM D2270)	141
CCS Viscosity, cP (ASTM D5293)	5968
Pour Point °C (°F) (ASTM D97)	-40 (-40)
Flash Point °C (°F) (ASTM D92)	246 (475)
Fire Point °C (°F) (ASTM D92)	264 (507)
Four-Ball Wear Test (ASTM D4172B @ 40 kg, 75°C, 1200 rpm, 1 hr), Scar, mm	0.45
NOACK Volatility, % weight loss (ASTM D5800)	4.0
High-Temperature/High-Shear Viscosity (ASTM D4683 @ 150°C, 1.0 X 10^6 $s.^{-1}$), cP	3.3
Total Base Number	8.5

APPLICATIONS

Use in gasoline or diesel engines, transmissions, hydraulics and chaincases that require SAE 30 or 10W-30 oil and any of the following specifications:

- API SL, SJ, SH, SG… (Gasoline)
- API CD, CF (Diesel)
- JASO MA/MA2, ISO-L-EMA2 (Wet-Clutch)

Engine manufacturers include: Briggs & Stratton*, Kohler*, Honda*, Tecumseh*, Robin*, Kawasaki*, Onan*, Kubota*, Yanmar*, Wisconsin*, Power Train*, Vanguard* and Linamar*.

Equipment brands include: Toro*, Ariens*, Sears Craftsman*, John Deere*, MTD*, Bolens*, Dixie Chopper*, Yard-Man*, Coleman*, Murray*, Troy-Bilt*, Ex-Cell*, Generac*, Snapper*, Simplicity*, Ingersoll Rand*, Wheel Horse*, Homelite*, Porter-Cable*, Devilbiss*, Poulan*, Campbell Hausfeld*, Massey Ferguson*, Thomas*, Bobcat*, Kubota*, New Holland* and Caterpillar*.

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

COMPATIBILITY

AMSOIL Formula 4-Stroke Synthetic Small Engine Oil is compatible with conventional and synthetic motor oils. Mixing AMSOIL motor oils with other oils, however, will shorten the oil's life expectancy and reduce the performance benefits.

Aftermarket oil additives are not recommended for use with AMSOIL motor oils.

SERVICE LIFE

AMSOIL Formula 4-Stroke Synthetic Small Engine Oil is a long-life formulation that can last longer than conventional petroleum oils. It provides an extra measure of protection when equipment typically goes longer between oil changes than is recommended by the equipment manufacturer. Due to wide variances in operating conditions and maintenance practices, AMSOIL recommends extending drain intervals when monitored by oil analysis or following the equipment manufacturer-established drain intervals.

AMSOIL PRODUCT WARRANTY

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

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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The First in Synthetics®

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

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