



*The First in Synthetics®*

## Formula 4-Stroke® 10W-30/SAE 30 Synthetic Small Engine Oil (ASE)

**Commercial Grade Synthetic Oil for  
Compact Gasoline and Diesel Engines Operating  
Under Adverse Conditions**

### **PRODUCT DESCRIPTION**

AMSOIL Formula 4-Stroke® Small Engine Oil (ASE) 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 ASE has a naturally high viscosity index and does not contain paraffin (wax). It has a -38°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 ASE 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 engineered Formula 4-Stroke® Small Engine Oil 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 ASE lasts longer in service than conventional oils and keeps engines clean for peak operating efficiency.

### **Excellent for Transmission Systems**

AMSOIL Formula 4-Stroke® Small Engine Oil is a shear stable formulation that contains no friction modifiers. It will not break down during rigorous mechanical activity, making it ideal for hydraulic or hydrostatic systems and chain cases. It is wet clutch compatible and designed to prevent clutch slippage in commercial or recreational transmissions. AMSOIL Formula 4-Stroke® Small Engine Oil protects gears and bearings during high-demand, commercial duty service.

### **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 prone to small engines. Anti-rust additives further protect equipment during storage or infrequent use.



## TYPICAL TECHNICAL PROPERTIES

### Formula 4-Stroke® 10W-30/SAE 30 Synthetic Small Engine Oil (ASE)

Kinematic Viscosity @ 100°C, cSt (ASTM D-445)	10.6
Kinematic Viscosity @ 40°C, cSt (ASTM D-445)	67.0
Viscosity Index (ASTM D-2270)	146
Pour Point °C (°F) (ASTM D-97)	-39 (-38)
Flash Point °C (°F) (ASTM D-92)	236 (457)
Fire Point °C (°F) (ASTM D-92)	256 (493)
Four-Ball Wear Test (ASTM D-4172B @ 40 kg, 75°C, 1200 rpm, 1 hr), Scar, mm	0.40
Noack Volatility, % weight loss (ASTM D-5800)	4.1
High-Temperature/High-Shear Viscosity (ASTM D-4683 @ 150°C, 1.0 X 10 <sup>6</sup> s.-1), cP	3.25
Total Base Number	8.4

### Applications and Recommendations

AMSOIL Formula 4-Stroke® Synthetic Small Engine Oil is recommended for use wherever SAE 10W-30 or SAE 30 oil is specified in gasoline or diesel engines, transmissions, hydraulics and chain cases that require the following:

- API SL, SJ, SH, SG... (Gasoline)
- API CF, CD (Diesel)
- JASO MA/MA2 (Motorcycle 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, Murry, Troy-Bilt, Ex-Cell Generac, Snapper, Simplicity, Ingersoll, Wheel Horse, Homelite, Porter-Cable, Devilbass, Poulan, Cambell, Hausfeld, Massey Ferguson, Thomas, Bobcat, Kubota, New Holland and Caterpillar.

*Applications 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.

### Mixing AMSOIL

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 life expectancy and reduce the performance benefits.

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

### Service Life

AMSOIL ASE 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.

### Health & Safety

This product is not expected to cause health concerns when used for the intended application and according to the recommendations in the Material Safety Data Sheet (MSDS). An MSDS is available upon request at 715-392-7101 or via the Internet at [www.AMSOIL.com](http://www.AMSOIL.com). **KEEP OUT OF REACH OF CHILDREN.** Don't pollute. Return used oil to collection centers.

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



All Service Oil  
1830 175th Lane NE  
Ham Lake, MN 55304  
reference #1240677

[www.allserviceoil.com](http://www.allserviceoil.com)  
[mikeford@allserviceoil.com](mailto:mikeford@allserviceoil.com)  
763.257.3130