



The First in Synthetics®

## Signature Series 100% Synthetic Motor Oil

### The Next Generation in Motor Oil Technology

AMSOIL Signature Series Synthetic Motor Oil is engineered to outperform conventional and synthetic motor oils. It combines industry-premier synthetic technology with AMSOIL premium additives in a unique formulation that exceeds the higher performance demands of modern engines. Signature Series delivers the performance and value upon which the AMSOIL reputation is built. The culmination of more than 40 years of expertise, its exclusive formulation raises the bar for motor oil performance.

*AMSOIL, the leader in automotive synthetic lubrication, produced the world's first API-qualified synthetic motor oil in 1972. Trust the extensive experience of AMSOIL, The First in Synthetics®, to do the best job protecting your engine.*

#### Protects Your Engine

AMSOIL Signature Series Synthetic Motor Oil provides outstanding anti-wear protection. It develops a strong fluid film that keeps metal surfaces separated while its robust anti-wear additives further reduce wear in metal-to-metal contact regions for maximum engine life. In the Sequence IIIG test, which is normally run for 100 hours, AMSOIL Signature Series Synthetic Motor Oil delivered outstanding wear protection for the camshaft and lifters, even after doubling the test interval to 200 hours. For details, see the Double-Length Sequence IIIG Engine Test Technical Study (G3320).

#### Maximizes Fuel Economy

Signature Series Synthetic Motor Oil is designed to maximize energy efficiency for optimum fuel economy. Unlike conventional oils, its uniform molecular structure helps it flow more freely and reduce friction between metal surfaces. Anti-friction additives are included to further improve energy efficiency.

#### Extends Drain Intervals

AMSOIL Signature Series Synthetic Motor Oil can extend drain intervals far beyond those recommended for conventional oils. Its unique synthetic formulation and long-drain additive system are inherently stable to resist oxidation and neutralize acids over longer periods. Signature Series is designed to deliver outstanding engine protection, cleanliness and performance over extended drain intervals. It reduces vehicle maintenance and waste oil.

#### Keeps Pistons Clean

Excess piston deposits can lead to pre-ignition and engine knocking, which results in lost power, reduced fuel economy and, in severe cases, engine damage. Signature Series' premium additives and naturally high resistance to extreme heat help keep pistons clean for maximum engine performance. After a double-length, 200-hour Sequence IIIG engine test, Signature Series demonstrated outstanding cleanliness properties and shattered the requirements of a 100-hour test.

#### Excels in Extreme Temperatures

Signature Series resists thermal (heat) breakdown better than conventional and synthetic motor oils. It is heavily fortified with detergent and dispersant additives to help prevent sludge deposits and keep engines clean. Unlike conventional oils, Signature Series contains no wax, staying fluid in sub-zero temperatures for easier starting, improved oil flow and reduced wear.

#### Reduces Oil Consumption and Emissions

Volatility (burn-off) occurs when oil gets hot, causing high oil consumption and emissions. Signature Series resists volatility better than other oils, helping reduce oil consumption and emissions.



Piston After Double-Length Sequence IIIG Engine Test



Signature Series Synthetic Motor Oil delivered outstanding piston cleanliness after 200 hours of testing.

## TYPICAL TECHNICAL PROPERTIES

### AMSOIL Signature Series Synthetic Motor Oil

	0W-20 (ASM)	5W-20 (ALM)	0W-30 (AZO)	5W-30 (ASL)	10W-30 (ATM)
Kinematic Viscosity @ 100°C, cSt (ASTM D445)	8.7	8.6	10.5	10.4	10.4
Kinematic Viscosity @ 40°C, cSt (ASTM D445)	46.6	49.7	58.2	59.9	62.3
Viscosity Index (ASTM D2270)	167	152	171	163	156
CCS Viscosity, cP @ (°C) (ASTM D5293)	4290 (-35)	4008 (-30)	5219 (-35)	3954 (-30)	3485 (-25)
Flash Point °C (°F) (ASTM D92)	228 (442)	230 (446)	226 (439)	228 (442)	232 (450)
Fire Point °C (°F) (ASTM D92)	248 (478)	250 (482)	248 (478)	248 (478)	250 (482)
Pour Point °C (°F) (ASTM D97)	-53 (-63)	-53 (-63)	-51 (-60)	-51 (-60)	-48 (-54)
NOACK Volatility, % weight loss (g/100g) (ASTM D5800)	10	6.3	8.4	7.5	5.3
High-Temperature/High-Shear Viscosity @ 150°C, 1.0 X 10 <sup>6</sup> s. <sup>-1</sup> , cP (ASTM D5481)	2.7	2.7	3.1	3.1	3.1
Four-Ball Wear Test @ 40 kgf, 75°C, 1200 rpm, 1 hr, scar diameter, mm (ASTM D4172)	0.35	0.35	0.35	0.35	0.35
Total Base Number (ASTM D2896)	12.6	12.6	12.6	12.6	12.6

## APPLICATIONS

AMSOIL Signature Series Synthetic Motor Oil is excellent for use in all types of gasoline-fueled vehicles. It is recommended for all domestic and foreign vehicles requiring any of the listed performance specifications:

**0W-20 (ASM):** API SN (Resource Conserving), SM...; ILSAC GF-5, GF-4...; ACEA A1/B1; GM dexos1™ (supersedes 6094M) *Fortified with detergents that exceed dexos1 sulfated ash specifications*; Chrysler MS-6395; Ford WSS-M2C947-A

**5W-20 (ALM):** API SN (Resource Conserving), SM...; ILSAC GF-5, GF-4...; ACEA A1/B1; Ford WSS-M2C945-A, WSS-M2C930-A; Chrysler MS-6395; GM dexos1™ (supersedes 6094M) *Fortified with detergents that exceed dexos1 sulfated ash specifications*.

**0W-30 (AZO):** API SN (Resource Conserving), SM...; ILSAC GF-5, GF-4...; ACEA A5/B5, A1/B1; Chrysler MS-6395; GM dexos1™ (supersedes LL-A-025, 6094M and 4718M) *Fortified with detergents that exceed dexos1 sulfated ash specifications*.

**5W-30 (ASL):** API SN (Resource Conserving), SM...; ILSAC GF-5, GF-4...; ACEA A5/B5, A1/B1; Honda HTO-06; Ford WSS-M2C946-A, WSS-M2C929-A; Chrysler MS-6395; GM dexos1™ (supersedes LL-A-025, 6094M and 4718M) *Fortified with detergents that exceed dexos1™ sulfated ash specifications*.

**10W-30 (ATM):** API SN (Resource Conserving), SM...; ILSAC GF-5, GF-4...; ACEA A5/B5, A1/B1; GM LL-A-025, 6094M, 4718M; Ford WSS-M2C205-A; Chrysler MS-6395

## COMPATIBILITY

AMSOIL Signature Series Synthetic Motor Oil is compatible with other conventional and synthetic motor oils. Mixing AMSOIL motor oils with other oils, however, will shorten the oil's life expectancy and reduce its 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 motor oils.

## SERVICE LIFE

- **Normal Service** – Up to 25,000 miles or one year, whichever comes first, in personal vehicles not operating under Severe Service.
- **Severe Service** – Up to 15,000 miles or one year, whichever comes first.

**Severe Service:** Primarily short trips (less than 10 miles [16 km]); turbo/supercharged engines; commercial or fleet vehicles; excessive idling; first-time use of AMSOIL motor oil in a vehicle with more than 100,000 miles; frequent towing, hauling, plowing or driving in dusty conditions.

- Modified engines (non-stock) and those using E85 fuel are excluded from extended drain recommendations.
- Change at the vehicle manufacturer's recommended drain interval outside U.S. and Canada.
- AMSOIL Ea® Full-Flow Oil Filters are designed for extended change intervals. With other brands, do not exceed six months or 10,000 miles unless longer intervals are recommended by the vehicle manufacturer.
- Check oil regularly to maintain proper fill levels.

AMSOIL Ea® Full-Flow Oil Filters are designed for extended change intervals. They stop smaller particles, flow more oil and last longer than regular filters. For best performance, use AMSOIL Ea Full-Flow Oil Filters.

## AMSOIL PRODUCT WARRANTY

AMSOIL products are backed by a Limited Liability Warranty. For complete information visit [www.amsoil.com/warranty.aspx](http://www.amsoil.com/warranty.aspx).

## HEALTH & SAFETY

This product is not expected to cause health concerns when used for the intended application and according to the recommendations in the Safety Data Sheet (SDS). An SDS is available via the Internet at [www.amsoil.com](http://www.amsoil.com) or upon request at (715) 392-7101. **Keep Out of Reach of Children.** Don't pollute. Return used oil to collection centers.



Jeff Fisher

866-292-4700

[www.SyntheticOils.us](http://www.SyntheticOils.us)

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