



## Z-ROD™ 10W-30 and 20W-50 Synthetic Motor Oil

### Modern Technology for Classic cars

AMSOIL Z-ROD™ Synthetic Motor Oil is specially engineered for classic and high-performance vehicles. It features a high-zinc formulation to prevent wear on flat-tappet camshafts and other critical engine components, along with a proprietary blend of rust and corrosion inhibitors for added protection during long-term storage. Z-ROD Synthetic Motor Oil is designed to perform on the street and protect during storage.

*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 Flat-Tappet Cams

The lifters and cam lobes on flat-tappet camshafts common to classic and high-performance vehicles slide rapidly against one another, producing high friction and heat. The friction between the two components can eventually wear down the cam and affect valve operation, ultimately resulting in lost engine power and reduced efficiency. In addition, these areas are splash-lubricated rather than pressure-lubricated like other areas of the engine, which adds extra strain on anti-wear additives like the zinc and phosphorus in zinc dialkyldithiophosphate (ZDDP).

AMSOIL Z-ROD Synthetic Motor Oil is formulated with high levels of ZDDP to protect flat-tappet cams, lifters, rockers and other areas susceptible to wear. Its high-zinc, high-phosphorus formulation provides the extra wear protection these critical splash-lubricated components require.

#### Provides Long-Term Protection from Rust & Corrosion

AMSOIL Z-ROD Synthetic Motor Oil is formulated with a unique blend of rust and corrosion inhibitors to ensure maximum protection during long-term storage. To prove its effectiveness, AMSOIL submitted Z-ROD Synthetic Motor Oil to the Standard Test Method for Rust Protection in the Humidity Cabinet (ASTM D-1748). This test evaluates the rust-preventative properties of oil under high-humidity conditions, similar to those faced by a covered hot rod in a damp garage. The metal coupon treated with AMSOIL Z-ROD Synthetic Motor Oil showed no signs of oxidation after 192 hours, while the coupon treated with a leading competitor's product failed the test after 24 hours.



After 192 hours in a humidity cabinet, the metal coupon treated with Z-ROD Synthetic Motor Oil showed no signs of rust or corrosion.



After 192 hours in a humidity cabinet, the metal coupon treated with a leading competitive product rusted severely.



## TYPICAL TECHNICAL PROPERTIES

### AMSOIL Z-ROD Synthetic Motor Oil

	10W-30 (ZRT)	20W-50 (ZRF)
Viscosity @ 100 °C, cSt (ASTM D-445)	11.8	19.1
Viscosity @ 40 °C, cSt (ASTM D-445)	72.5	132.5
Viscosity Index (ASTM D-2270)	157	163
Flash Point, °C (°F) (ASTM D-92)	234 (453)	236 (457)
Fire Point, °C (°F) (ASTM D-92)	248 (478)	252 (486)
Pour Point, °C (°F) (ASTM D-97)	-45 (-49)	-39 (-38)
NOACK Volatility, % weight loss (g/100g) (ASTM D-5800)	5.2%	4.7%
High-Temperature/High-Shear Viscosity @150°C, 1.0 X 10 <sup>6</sup> s <sup>-1</sup> , cP (ASTM D-5481)	3.6	5.1
Four-Ball Wear @40 kgf, 75°C, 1200 rpm, 1 hr, scar diameter, mm (ASTM D-4172)	0.36	0.36
Total Base Number (ASTM D-2896)	9.0	9.0

### APPLICATIONS

AMSOIL Z-ROD Synthetic Motor Oil is recommended for older or modified engines requiring either 10W-30 or 20W-50 motor oil. Z-ROD Synthetic Motor Oil meets API SL and earlier specifications, allowing for increased levels of anti-wear additives. ZDDP levels in Z-ROD Synthetic Motor Oil exceed the limits of API SM and newer specifications.

### COMPATIBILITY

AMSOIL Z-ROD Synthetic Motor Oils are compatible with conventional and other synthetic motor oils. Mixing AMSOIL Z-ROD Synthetic 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 Z-ROD Synthetic Motor Oils.

### SERVICE LIFE

Because classic cars, hot rods and other performance vehicles are generally modified by their owners, AMSOIL Z-ROD Synthetic Motor Oil is recommended for a maximum drain interval of 5,000 miles or one year, whichever comes first. Heavily modified vehicles (forced induction, nitrous) should not exceed 3,000 miles or one year between oil changes, whichever comes first.

### 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 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.

For warranty information, visit [www.amsoil.com/warranty.aspx](http://www.amsoil.com/warranty.aspx).



Contact your AMSOIL Dealer for more information on AMSOIL products or to place an order. You may also order direct by calling AMSOIL INC. at 1-800-956-5695 and providing the referral number listed here. ▼

Referral # \_\_\_\_\_