Product One Voice
Q&A

Product: Z-ROD™ Motor Oil
Product Area: Powersports
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1. **Question:**
   What is the primary market for AMSOIL 10W-30 and 20W-50 Z-ROD™ Synthetic Motor Oils?

   Answer:
   Z-ROD Motor Oil targets owners of classic and earlier model high-performance vehicles. These owners need motor oil that protects engines during operation and throughout long periods of storage.

2. **Question:**
   What are the package sizes and product codes?

   Answer:

	Quart	Case of 12 quarts
AMSOIL Z-ROD 10W-30	*ZRTQT-EA*	*ZRTQT-CA*
AMSOIL Z-ROD 20W-50	*ZRFQT-EA*	*ZRFQT-CA*

3. **Question:**
   What are the differences between AMSOIL 10W-40 (AMO) and 20W-50 (ARO) Premium Protection Motor Oils and AMSOIL Z-ROD Motor Oils?

   Answer:
   Z-ROD Motor Oils and Premium Protection Motor Oils are formulated with high levels of zinc dialkyldithiophosphates (ZDDP) to protect flat-tappet camshafts, lifters, rockers and other areas susceptible to high levels of wear. AMSOIL Z-ROD Motor Oils are formulated with additional additives designed to protect against rust and corrosion during long periods of storage, ensuring vehicles are protected in all conditions.

4. **Question:**
   Why is it important to protect flat-tappet camshafts, lifters and rocker arms from wear?

   Answer:
   Many classic cars, hot rods and earlier model high-performance vehicles are modified with custom flat-tappet camshafts, lifters and rocker arms for increased performance. High levels of additives are required to protect these critical high-wear areas because they are splash-lubricated, unlike other areas that are pressure-lubricated. AMSOIL Z-ROD Motor Oil contains a unique formulation of detergents and ZDDP which keeps engine components clean and protects these high-wear areas.

5. **Question:**
   Which types of engines is Z-ROD Motor Oil recommended for? Why?

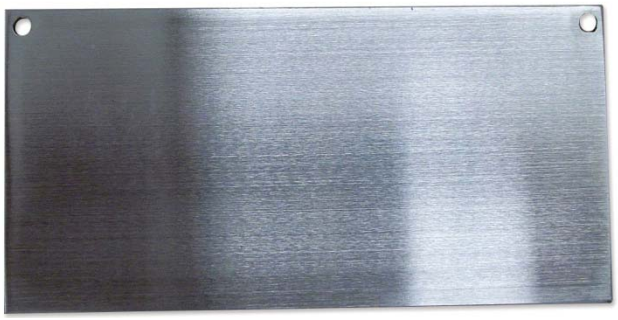
   Answer:

AMSOIL Z-ROD Motor Oil is recommended for older or modified engines requiring 10W-30 or 20W-50 motor oil. In 2004, the American Petroleum Institute (API) released the SM specification, which placed further limitations on ZDDP additives in order to protect catalytic converters. Motor oil formulated to meet API SM or newer specifications has a maximum limit of 800 parts per million (ppm) for ZDDP. Higher levels, such as those found in Z-ROD Motor Oil, are necessary to protect flat-tappet camshafts, lifters, rocker arms and other areas with high wear rates.

6. **Question:**
   How does AMSOIL Synthetic Z-ROD Motor Oil test against competitors?

   Answer:
   AMSOIL Z-ROD Motor Oil was tested for rust protection using the ASTM D-1748 Standard Test Method for Rust Protection. This test method evaluates the rust-preventive properties of oil under conditions of high humidity, representative of covered vehicles in damp garages. The pictures below demonstrate the superior rust protection provided by AMSOIL Synthetic Z-ROD Motor Oil compared to a leading competitor.

AMSOIL Z-ROD after 8 days



Leading competitor after 8 days

7. **Question:**
   What is the oil drain interval recommendation for AMSOIL Z-ROD Motor Oil?

   Answer:
   Because engines in classic cars, hot rods and other performance vehicles are generally modified, a universal oil drain interval recommendation for these applications cannot be given. Responsibility for determining the drain interval duration rests with the owner. As a general service guideline, the maximum drain interval for Z-Rod Synthetic Motor Oil should not exceed 5,000 miles or one year, whichever comes first. In heavily modified engines (e.g. forced induction, nitrous) the maximum drain interval should not exceed 3,000 miles or one year, whichever comes first.

8. **Question:**
   Can AMSOIL Z-ROD Motor Oil be used in racing applications?

   Answer:
   AMSOIL Z-ROD Motor Oil can be used in these applications, but AMSOIL Dominator® Racing Oil is the primary recommendation. Dominator Racing Oil is formulated to provide maximum performance and protection in racing applications. Z-ROD Motor Oil is designed to meet the dual needs of classic and vintage applications, providing wear protection during use and throughout long periods of storage.