



## Premium Protection Synthetic Motor Oil

Automobiles • Motorcycles • Motor Homes  
• Heavy Equipment

AMSOIL Premium Protection Synthetic Motor Oil is formulated to provide superior protection and performance in a wide variety of demanding applications. Its unique combination of synthetic base stocks and a superior additive package results in a formulation that exceeds the requirements of most gasoline or diesel applications that call for 10W-40 or 20W-50 motor oil. Premium Protection Synthetic Motor Oil is ideal for high-mileage vehicles and high-stress vehicles subject to hot temperatures, heavy hauling, trailer pulling or off-road use. It provides the extra anti-wear protection required by engines with flat-tappet cams and high-tension valve springs. AMSOIL Premium Protection Synthetic Motor Oil offers flexibility and performance beyond conventional oils for convenience and trouble-free operation.

*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.*



### Superior Wear Protection

AMSOIL Premium Protection Synthetic Motor Oil is high-viscosity oil engineered to protect against metal-to-metal contact. It resists viscosity shear and is formulated with a heavy treatment of zinc and other anti-wear additives for excellent protection of gears, bearings, cam lobes and other high-pressure components in engines and transmissions. AMSOIL Premium Protection Synthetic Motor Oil helps extend equipment life.

### Wet-Clutch Compatible

AMSOIL Premium Protection Synthetic Motor Oil contains no friction modifiers, making it ideal for motorcycles, maintenance equipment and other wet-clutch transmission applications. Formulated to prevent clutch glazing and slippage, it helps ensure smooth clutch engagement and long-term, dependable transmission operation. Premium Protection Synthetic Motor Oil reduces clutch wear for extended transmission life.

### Resists Oxidation and High-Temperature Breakdown

AMSOIL Premium Protection Synthetic Motor Oil is specifically formulated to overcome the thermal deficiencies common to conventional petroleum oils. Volatilization (burn-off), oxidation and excessive deposit formation from high heat are greatly reduced. Viscosity thickening is controlled and engines run cleaner, promoting cooler operation and long engine life in air- or liquid-cooled engines. In addition, the higher viscosity nature of AMSOIL 20W-50 Synthetic Motor Oil may help reduce motor oil consumption in equipment that experiences higher-than-normal usage rates when lower-viscosity lubricants are installed.

### Extends Drain Intervals in Gasoline and Diesel Engines

Superior AMSOIL synthetic base stock and additive technology exceeds the requirements of both gasoline and diesel engines. AMSOIL Premium Protection Motor Oil is designed to neutralize acids, disperse soot and last longer in service than conventional oils.

## TYPICAL TECHNICAL PROPERTIES

### AMSOIL Premium Protection Synthetic Motor Oil

	10W-40 (AMO)	20W-50 (ARO)
Kinematic Viscosity @ 100°C, cSt (ASTM D445)	14.5	18.9
Kinematic Viscosity @ 40°C, cSt (ASTM D445)	91.7	129.6
Viscosity Index (ASTM D2270)	164	165
CCS Viscosity, cP (°C) (ASTM D5293)	.5638 (-25)	3849 (-15)
Pour Point °C (°F) (ASTM D97)	-44 (-47)	-36 (-33)
Flash Point °C (°F) (ASTM D92)	230 (446)	234 (453)
Fire Point °C (°F) (ASTM D92)	250 (482)	250 (482)
High-Temperature/High-Shear Viscosity (ASTM D5481) @ 150°C, 1.0 X 10 <sup>6</sup> s <sup>-1</sup> , cP	4.3	5.0
Four-Ball Wear Test (ASTM D4172) @ 40 kg, 150°C, 1800 rpm, 1 hr, Scar, mm	0.40	0.40
NOACK Volatility, % weight loss (g/100g) (ASTM D5800)	6.7	6.7
Total Base Number	12.1	12.1

## APPLICATIONS

AMSOIL Premium Protection Synthetic Motor Oil is recommended for air- and liquid-cooled, large or small gasoline and diesel engines, transmissions and chaincase applications where 10W-40 or 20W-50 oils are required with any of the following specifications:

API SL, SJ, SH, SG	Volvo, VDS-2, VDS
API CI-4+, CI-4, CH-4, CF, CF-2	Mack EO-M+, EO-M
ISO-L-EMA	ACEA A3/B3, E3, E5
Caterpillar ECF-1	MB 228.1, 228.3, 229.1
JASO MA (Motorcycle)	Detroit Diesel 93K214
MAN 271/3275	
MTU Type 2	
Cummins 20071/20072/20076/20077	

## COMPATIBILITY

AMSOIL Premium Protection Synthetic Motor 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. 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

AMSOIL Premium Protection Synthetic Motor Oil is recommended for extended intervals in unmodified, mechanically sound vehicles or equipment as follows:

## Diesel Engine Service

Normal Service - Up to 25,000 miles or one year, whichever comes first, or longer based on oil analysis.

Severe Service - Up to 15,000 miles or one year, whichever comes first, or longer based on oil analysis.

## Gasoline Engine Service

Normal & Severe Service - Up to 15,000 miles or one year, whichever comes first, or longer based on oil analysis.

## Motorcycles, Small Engines, Stationary Engines, Heavy Equipment and Other Applications

Extend drain intervals based on oil analysis or follow the manufacturer-recommended drain interval.

For more information on product applications and service life, refer to the AMSOIL Product Recommendation and Drain Interval Guide (G1490).

## AMSOIL PRODUCT WARRANTY

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

## 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 online at [www.amsoil.com](http://www.amsoil.com) or upon request at (715) 392-7101. **Keep Out of Reach of Children.**

Recycle used oil and bottle.



*The First in Synthetics*®

Jeff Fisher

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

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