



Premium Protection Synthetic Motor Oil

Automobiles • Motorcycles • Motor Homes
• Heavy Equipment

AMSOIL 10W-40 and 20W-50 Premium Protection Synthetic Motor Oils are specially formulated to provide superior protection and performance in a wide variety of demanding applications. By incorporating high-quality synthetic base stocks and a superior high-zinc additive package, AMSOIL Premium Protection Oil exceeds the needs of large and small gasoline or diesel engines in cars, motorcycles, trucks, motor homes, maintenance equipment, heavy equipment, street rods and marine applications. They are ideal for high-mileage vehicles, vehicles with flat-tappet cams and high-stress vehicles subject to hot temperatures, heavy hauling, trailer pulling or off-road use. AMSOIL Premium Protection Oil resists oxidation, neutralizes acids, inhibits corrosion, reduces wear and protects against deposits. It provides the extra anti-wear protection required by engines with flat-tappet cams and high-tension valve springs. AMSOIL 10W-40 and 20W-50 Premium Protection Synthetic Motor Oils offer 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.



Provides Superior Wear Protection

AMSOIL 10W-40 and 20W-50 Premium Protection Synthetic Motor Oils are high-viscosity oils engineered to protect against metal-to-metal contact. They resist viscosity shear and are 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 engine life.

Exceeds the Requirements of Wet-Clutch Transmissions

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. AMSOIL 10W-40 and 20W-50 Synthetic Motor Oils reduce 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 10W-40 and 20W-50 Premium Protection Synthetic Motor Oils

	10W-40 (AMO)	20W-50 (ARO)
Kinematic Viscosity @ 100°C, cSt (ASTM D 445)	14.5	18.9
Kinematic Viscosity @ 40°C, cSt (ASTM D 445)	91.7	129.6
Viscosity Index (ASTM D 2270)	164	165
CCS Viscosity, cP (°C) (ASTM D 5293)	.5638 (-25)	3849 (-15)
Pour Point °C (°F) (ASTM D 97)	-44 (-47)	-36 (-33)
Flash Point °C (°F) (ASTM D 92)	230 (446)	234 (453)
Fire Point °C (°F) (ASTM D 92)	250 (482)	250 (482)
High-Temperature/High-Shear Viscosity (ASTM D 5481 @ 150°C, 1.0 X 10 ⁶ s ⁻¹), cP	4.3	5.0
Four-Ball Wear Test (ASTM D 4172 @ 40 kg, 150°C, 1800 rpm, 1 hr), Scar, mm	0.40	0.40
NOACK Volatility, % weight loss (g/100g) (ASTM D 5800)	6.7	6.7
Total Base Number	12.1	12.1

APPLICATIONS

AMSOIL 10W-40 and 20W-50 Premium Protection Synthetic Motor Oils are multi-use, premium synthetic lubricants for applications that require or benefit from a higher-viscosity oil. They are 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	VDS-2, VDS
API CI-4 Plus, CH-4, CF, CF-2	Mack 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 10W-40 and 20W-50 Premium Protection Synthetic Motor Oils are 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. 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 10W-40 and 20W-50 Premium Protection Synthetic Motor Oils are 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.

AMSOIL Ea® Full-Flow Oil Filters are designed for extended drain intervals. They stop smaller particles, have less restriction and last longer than regular filters. For best performance, use AMSOIL Ea® Oil Filters.

OIL ANALYZERS INC®, 715-395-0222, is a division of AMSOIL that provides cost-effective, quality oil analysis services.

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

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 online at www.amsoil.com or upon request at (715) 392-7101. For AMSOIL warranty information, visit www.amsoil.com.



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