



## European Car Formula 5W-40 Synthetic Motor Oil

### Superior Protection and Performance for Gasoline and Diesel European Vehicles

AMSOIL European Car Formula 5W-40 Synthetic Motor Oil (AFL) is specially formulated for the lubrication needs of modern European gasoline and diesel cars and light trucks. Formulated with advanced AMSOIL synthetic base stocks, premium additives and a 5W-40 viscosity rating, AMSOIL AFL is the preferred oil for virtually all European automobiles, especially turbo-charged models. AMSOIL European Car Formula is highly versatile for multiple applications.

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*<sup>®</sup>, to do the best job protecting your engine.



**VW 505.01**  
**Mercedes-Benz 229.51**  
**BMW LL-04**  
**API SM/CF**

#### Maximum Engine Protection

AMSOIL Synthetic European Car Formula contains high-quality anti-wear additives and surpasses the tough ACEA oil specifications for high-temperature/high-shear viscosity. It provides outstanding protection in high-RPM, hot-running engines and delivers dependable long-term performance for the extended drain intervals set by European automakers.

#### Superior Engine Cleanliness

The excellent oxidation stability, heat resistance and detergency properties of AMSOIL Synthetic European Car Formula keep engines clean. It is specially designed to prevent sludge and varnish deposits for reduced oil consumption, extended engine life and maximum overall performance.

#### Minimizes Exhaust Emissions

AMSOIL European Car Formula is designed for newer vehicle emission control systems. It meets current industry and vehicle manufacturer requirements for long-life protection of gasoline vehicle catalytic converters and diesel particulate filters (DPF).

#### All-Season Performance

The broad 5W-40 viscosity rating, low volatility (burn-off) and wax-free nature of AMSOIL Synthetic European Car Formula make it excellent for hot and cold temperatures. Engine wear is reduced, oil thickening is controlled and vehicles start easier in cold temperatures.



## TYPICAL TECHNICAL PROPERTIES

### European Car Formula 5W-40 Synthetic Motor Oil (AFL)

Kinematic Viscosity @ 100°C, cSt (ASTM D-445)	13.7
Kinematic Viscosity @ 40°C, cSt (ASTM D-445)	82.2
Viscosity Index (ASTM D-2270)	171
Viscosity CCS, cP @ °C (ASTM D-5293)	5171 (-30)
Flash Point °C (°F) (ASTM D-92)	230 (446)
Fire Point °C (°F) (ASTM D-92)	248 (478)
Pour Point, °C (°F) (ASTM D-97)	-43 (-45)
NOACK Volatility, % weight loss (g/100g) (ASTM D-5800)	8.9
Four-Ball Wear Test (ASTM D-4172B @ 40 kg, 75°C, 1200 rpm, 1hr), Scar, mm.	0.44
Total Base Number	8.0
HT/HS (cP) (ASTM D-5481)	3.8

## APPLICATIONS

AMSOIL Synthetic European Car Formula is formulated to surpass the most demanding European specifications. It is recommended for European and North American gasoline or diesel vehicles requiring any of the following worldwide specifications:

- API SM/CF
- ACEA C3
- ACEA A3/B3
- ACEA A3/B4
- BMW LL-04
- Mercedes Benz 229.31, 229.51
- Porsche A40
- Saab
- Volvo
- Volkswagen 502.00, 505.00, 505.01
- Chrysler MS-10725

## SERVICE LIFE

Recommended for the extended drain intervals established by the vehicle manufacturer or extend based on oil analysis. Change oil filter at time of oil change.

## MIXING AMSOIL

AMSOIL AFL is 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 motor oils.

## 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 AMSOIL warranty information visit [www.amsoil.com](http://www.amsoil.com).



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 # \_\_\_\_\_