

Mobil 1

Unsurpassed Performance Synthetic Motor Oil

Product Description

Mobil 1 is the ultimate performance, synthetic engine oil designed to provide unsurpassed protection for the engines of all gasoline-powered passenger cars, light trucks and vans. Mobil 1 is particularly suitable for high performance engines, especially those fitted with turbochargers, operating under the most severe conditions.

Mobil 1 is formulated from wax-free synthesized hydrocarbons and a unique, proprietary additive system to provide exceptional thermal and oxidation stability. This, together with its naturally high resistance to viscosity change with temperature, ensures that full protection is maintained at temperatures at which other oils begin to oxidize, degrade and thicken.

Mobil 1 remains fluid at temperatures well below -54°C and provides outstanding starting and wear protection during the critical warm-up period, even under the most extreme cold weather conditions.

Extensive field experience and testing clearly demonstrate that Mobil 1 has the ability to maintain engines in an "as new" condition, with virtually no wear and minimal sludge or deposit build-up. After more than 300,000 km of severe operation, critical engine components remained within the manufacturers measurement specifications for new parts. The inherently low traction coefficient of the synthesized hydrocarbons reduces power losses and contributes to significant improvements in fuel economy. Emissions are reduced and catalyst efficiency is increased.

These performance features result in extended engine life and benefits unattainable by mineral oil-based and semi-synthetic products.

Specifications

Mobil 1 Series meet or surpass the following specifications:

- API SH, SJ/CF, SG and SH/CD service classifications
- API "Energy Conserving II" requirements (Mobil 1 SAE 5W-30) API "Energy Conserving" requirements (Mobil 1 SAE 5W-40, Mobil 1 SAE 5W-50)
- CCMC G-5, CCMC PD-2 (Mobil 1 SAE 5W-30, Mobil 1 SAE 5W-40 Mobil 1 SAE 5W-50) CCMC G-4, CCMC PD-2 (Mobil 1 SAE 15W-50)
- VW 501.01, 505.00 performance (Mobil 1 SAE 5W-50, Mobil 1SAE 15W-50)
- VW 500.00, 505.00 performance (Mobil 1 SAE 5W-30, Mobil 1 SAE 5W-40)

- Ford WSE-M2C903-A1 Initial Fill
- General Motors GM 9985847 Factory Fill (Mobil 1 SAE 5W-30) General Motors GM 4718 M Service Fill (Mobil 1 SAE 5W-30)
- JASO Valve Train Wear Test

Mobil 1 SAE 5W-40, Mobil 1 SAE 5W-50 and Mobil 1 SAE 15W-50 exceed the engine oil requirements of BMW and Porsche.

Benefits

Mobil 1 offers performance benefits which are beyond those possible with other synthetic, semi-synthetic and mineral oil-based engine oils. These benefits include the following:

- Engine performance maintained "as new" due to outstanding protection against wear and exceptional cleanliness of engine parts
- Longer engine life
- Superior cold weather starting, prolonging battery life
- Significant fuel savings
- Low exhaust emissions maintained at "new car" level, even after prolonged engine life

Typical Properties

| Mobil 1 SAE | | 5W-30 | 5W-40 | 5W-50 | 15W-50 |
|--|--------------------|----------|----------|-----------|----------|
| Product Code | | 971133 | 974896 | 971596 | 976253 |
| | Test Method | | | | |
| SAE Grade | | 5W-30 | 5W-40 | 5W-50 | 15W-50 |
| Viscosity | ASTM D445 | | | | |
| cSt at 40°C | | 57 | 84 | 102 | 114 |
| cSt at 100°C | | 9.9 | 14.3 | 17.3 | 17.5 |
| Viscosity Index | ASTM D2270 | 161 | 178 | 187 | 184 |
| Viscosity after shear, cSt at 100°C | | 9.6 | 13.9 | 16.8 | 16.8 |
| High Temperature/High Shear (HTHS) | ASTM D4683 | | | | |
| Viscosity (150°C/10 ⁶ s ⁻¹) cSt | | 3.3 | 4.0 | 4.4 | 4.6 |
| CCS Viscosity | ASTM D5293 | | | | |
| cP at -25°C | | 2900 | 3200 | 3300 | - |
| cP at -20°C | | - | - | - | 3800 |
| MRV Viscosity/Yield Stress | ASTM D4684 | | | | |
| cP at -30°C | | 6200/<35 | 9200/<35 | 11200/<35 | - |
| cP at -20°C | | - | - | - | 7000/<35 |
| Noack Volatility | CEC | | | | |

| | | | | | |
|-----------------|----------|------|------|------|------|
| 1 hr at 250°C | L-40-T87 | | | | |
| Loss wt % | | 8.0 | 6.9 | 6.9 | 5.5 |
| Flash Point, °C | ASTM D92 | 230 | 230 | 240 | 230 |
| Pour Point, °C | ASTM D97 | <-54 | <-54 | <-54 | <-54 |

Applications

Mobil 1 is recommended for use in all types of passenger cars and light duty trucks and vans powered by gasoline engines. It is particularly recommended for high performance engines, including those which are turbocharged. It is not recommended for two-stroke or aviation engines unless specifically approved by the builder. Mobil 1 SAE 15W-50 is especially suited for hot-running, high performance cars and heavily loaded vehicles. Maximum fuel savings are achieved with Mobil 1 SAE 5W-30. Car maker's recommendations for oil drain and filter change intervals should be followed.

Health & Safety

Based on available toxicological information, these products produce no adverse effects on health when properly handled and used. No special precautions are suggested beyond attention to good personal hygiene, including laundering oil-soaked clothing and washing skin contact areas with soap and water. Additional health and safety information on these products, including Material Safety Data Bulletins, are available on request from your local Mobil company.