



Technical Data Sheet

PLATINUM[®] FULL SYNTHETIC MOTOR OIL

DESCRIPTION

Pennzoil Platinum[®] full synthetic motor oil with superior Active Cleansing Agents* continuously attacks potential and stubborn deposits to help keep the engine clean. It also contains special protective additives for our ultimate engine protection that meets or exceeds USA and European industry standards like ILSAC GF-4, API SM and ACEA performance. Pennzoil Platinum[®] motor oil is designed to provide our ultimate cleansing under the most severe driving style or conditions to help maximize engine responsiveness.

FEATURES

- Superior Active Cleansing Agents*
- All standard grades of Pennzoil Platinum[®] motor oil are engineered with our unique Adaptive Molecules™. These molecules are designed to:
 - Maintain viscosity control under high heat
 - Prevent viscosity loss due to shearing by reforming continuously
 - Withstand extreme pressures at critical points by clustering together, acting like microscopic shock absorbers to absorb the impact
- Superior clean up compared to our conventional and synthetic blend formulations
- Full synthetic performance to resist oil breakdown and development of deposits
- Can be used interchangeably with conventional and synthetic blends in most applications for the same viscosity grade

BENEFITS and APPLICATIONS

- Actively helps keep engine clean
- Our ultimate protection against high-temperature deposits
- Our ultimate protection against viscosity breakdown
- Fast lubrication at extremely low temperatures making start up easy
- Lower oil consumption under high temperature conditions due to decreased volatility of base oils
- The recommended Pennzoil[®] motor oil for high performance applications demanding our best oil such as GM Corvette, Cadillac (SAE 5W-30 and SAE 10W-30) and Acura RDX Turbocharged engines (SAE 5W-30)
- Always consult your owner's manual for the correct viscosity choice and specification grade of oil required. Viscosity recommendations often allow a range of viscosities based on local temperatures. Applications include:
 - SAE 0W-20 – Original Equipment Manufacturer (OEM) recommendations in some hybrid vehicle applications, a limited number of low temperature applications and some newer vehicles
 - SAE 5W-20 – Many current and recent OEM recommendations including many 2001 and later Ford and Honda, and later Chrysler, Nissan and Toyota applications
 - SAE 5W-30 – Many of the remaining US and Japanese OEM recommendations including General Motors, Suzuki, Subaru and Hyundai
 - SAE 10W-30 – Several specialty and truck applications for different OEMs. Suitable for use in some older vehicles.
 - SAE 5W-50 – May be suitable for some performance and older vehicles and in some higher temperature applications
 - SAE 15W-50 – May be used in some high performance applications where very low temperatures are not encountered
- Pennzoil Platinum[®] motor oil is also available in several European Formula grades suitable for many of the premium and high performance cars from European manufacturers. See separate data sheet for Pennzoil Platinum[®] European Formula products. Pennzoil Platinum[®] European Formula SAE 5W-40, Pennzoil Platinum[®] European Formula SAE 0W-30, Pennzoil Platinum[®] European Formula Ultra SAE 5W-30, and Pennzoil Platinum[®] European Ultra Diesel SAE 5W-30.

*Compared to our conventional oils

SPECIFICATIONS & APPROVALS

Pennzoil Platinum[®] motor oil meets or exceeds:

- North American warranty requirements for U.S., European and Japanese cars and light trucks with gasoline and gasoline turbo-charged engines where API SM and earlier API categories are specified
- North American warranty requirements for U.S., European and Japanese cars and light trucks with diesel engines where API CF oils are specified (SAE 10W-30, SAE 5W-50 and SAE 15W-50)
- ILSAC GF-4Energy Conserving performance standard (SAE 0W-20, SAE 5W-20, SAE 5W-30 & SAE 10W-30)
- Meets the most advanced emissions and fuel economy standards in the US gasoline powered engines (SAE 0W-20, SE 5W-20, SAE 5W-30, SAE 10W-30)
- Meets Chrysler MS 6395Q (SAE 5W-20, SAE 5W-30, SAE 10W-30)
- Meets Ford WSS M2C930-A (SAE 5W-20) and WSS-M2C929-A (SAE 5W-30)
- Meets GM 6094M specification (SAE 5W-20, SAE 5W-30 and SAE 10W-30)
- Meets GM 4718M specification for Corvette and Cadillac (SAE 5W-30 and SAE 10W-30)
- Meets Acura HTO-06 for turbo-charged applications (SAE 5W-30)
- Meets demanding ACEA requirements (all grades)

Health & Safety

Guidance on Health and Safety are available on the appropriate Material Safety Data Sheet, which can be obtained from your Pennzoil[®] representative.

Protect the environment

Take used oil to an authorized collection point. Do not discharge into drains, soil or water

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

| TEST | METHOD | TYPICAL RESULTS | | | |
|---------------------------------|-------------|-----------------|--------------|--------------|-------------|
| | | 0W-20 | 5W-20 | 5W-30 | 10W-30 |
| Viscosity Grade. | | SM | SM/CF | SM/CF | SM/CF |
| API Service | | GF-4 | GF-4 | GF-4 | GF-4 |
| ILSAC | | A1-02 | A1-02 | A5/B5-04 | A5/B5-04* |
| Gravimetric, °API | ASTM D-287 | 35.2 | 34.1 | 34.0 | 33.3 |
| Specific Gravity @ 60°F(15.6°C) | ASTM D-287 | 0.849 | 0.854 | 0.855 | 0.859 |
| Viscosity | | | | | |
| @ 40°C, cSt | ASTM D-445 | 44.2 | 45.73 | 57.5 | 61.4 |
| @ 100°C, cSt | ASTM D-445 | 8.43 | 8.46 | 10.2 | 10.2 |
| Viscosity Index | ASTM D-2270 | 171 | 164 | 166 | 154 |
| Flash Point, °C | ASTM D-93 | 224 | 224 | 224 | 240 |
| Pour Point, °C | ASTM D-97 | -45 | -42 | -45 | -39 |
| MRV viscosity, cP (°C) | ASTD D-4684 | 14,600 (-40) | 11,600 (-35) | 15,700 (-35) | 9,900 (-30) |
| CCS Viscosity, cP (°C) | ASTM D-5293 | 5,580 (-35) | 4,250 (-35) | 5,200 (-35) | 3,990 (-30) |
| HT/HS Viscosity, cP | ASTM D-4683 | 2.6 | 2.6 | 3.0 | 3.1 |
| Noack Volatility, % | ASTM D-5800 | 13.4 | 13.2 | 11.6 | 9.9 |

| TEST | METHOD | TYPICAL RESULTS | |
|---------------------------------|-------------|-----------------|--------------|
| | | 5W-50 | 15W-50 |
| Viscosity Grade. | | SM/CF | SM/CF |
| API Service | | A3/B4-04 | A3/B4-04 |
| ACEA | | | |
| Gravimetric, °API | ASTM D-287 | 33.7 | 32.5 |
| Specific Gravity @ 60°F(15.6°C) | ASTM D-287 | 0.857 | 0.863 |
| Viscosity | | | |
| @ 40°C, cSt | ASTM D-445 | 106 | 143 |
| @ 100°C, cSt | ASTM D-445 | 17.8 | 21.4 |
| Viscosity Index | ASTM D-2270 | 186 | 175 |
| Flash Point, °C | ASTM D-93 | ≥ 224 | ≥ 224 |
| Pour Point, °C | ASTM D-97 | -45 | -33 |
| MRV viscosity, cP (°C) | ASTD D-4684 | 26,600 (-35) | 13,900 (-25) |
| CCS Viscosity, cP (°C) | ASTM D-5293 | 5,940 (-30) | 4070 (-20) |
| HT/HS Viscosity, cP | ASTM D-4683 | 4.1 | 5.2 |
| Noack Volatility, % | ASTM D-5800 | 12.5 | 7.6 |

*Meets engine protection requirements

These characteristics are typical of current production. While future production will conform to Shell's specifications, variations in these characteristics may occur. The information contained herein is subject to change without notice.