Technical Data Sheet

PENNZOIL® MOTOR OIL

PRODUCT DESCRIPTION

PENNZOIL® MOTOR OIL from the maker of the leading motor oil in America, an advanced proprietary conventional formula with Active Cleansing Agents. Not only helps prevent dirt and contaminants from turning into performance robbing deposits, but also cleans out sludge. Because at Pennzoil we know, a cleaner engine is better protected and responsive.
It meets or exceeds the engine protection required by ILSAC GF-5 (SAE 5W-20, SAE 5W-30, SAE 10W-30), or API SN (SAE 10W-40, 20W-50), and is specially formulated to provide extra protection against the harmful effects of stop-and-go driving and high and low-temperature engine operation.

APPLICATION

PENNZOIL® MOTOR OIL is suitable for passenger cars, light-duty trucks, vans and sport utility vehicles that are fueled with gasoline including E10 and E85 grades. PENNZOIL® MOTOR OIL SAE 5W-20, SAE 5W-30 and SAE 10W-30 meets or exceeds the demanding requirements of International Lubricant Standardization and Approval Committee (ILSAC) GF-5. ILSAC GF-5 comprises the latest industry standard for passenger car, van, light truck and sport utility vehicles (SUV's), and the engine oil service fill requirements of many US and Japanese OEM (original equipment manufacturer). It meets or exceeds the performance requirements of API SN Service Classification.

PENNZOIL® MOTOR OIL multi-viscosity motor oil SAE 10W-40 & 20W-50 are suitable for engines were the owner's manual recommends API SN or prior API Service Classifications in this viscosity grade. This includes some older vehicles and some performance and modified vehicles. This product features deposit control additives proven over extensive field trials in demanding taxi applications to help prevent sludge and deposits.

Viscosity recommendations vary according to temperature and engine manufacturer. For most cars (ca 1993 and later), API licensed oils displaying the "starburst" symbol (indicating an ILSAC GF-5, ILSAC GF-4, ILSAC GF-3 or GF-2 requirement), are recommended by OEMs.

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 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, Japanese and Korean vehicle recommendations including General Motors, Suzuki, Subaru, Hyundai
SAE 10W-30 – Several specialty and truck applications for different manufacturers. This was the predominant grade of oil in the mid-1990s and is still recommended for some higher temperature applications.
SAE 10W-40 – May be suitable for some older vehicles and in some higher temperature applications.
SAE 20W-50 - May be suitable for some older vehicles and in some higher temperature applications.

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FEATURES

Pennzoil Motor oil with active cleansing technology

- Cleans out up to 40% of engine sludge in the 1st oil change. Continues to clean in the 2nd oil change*
  * Based on severe sludge clean-up test using SAE 5W-30
- No leading conventional oil helps keep engines cleaner[1].
  [1]Based on Sequence VG sludge test on SAE 5W-30.
- No leading conventional oil provides better wear protection[2].
  [2]Based on Sequence IVA wear test on SAE 5W-30.

BENEFITS

Pennzoil motor oil with Active Cleansing Agents:

- Helps prevent sludge and other damaging deposits.
- Helps clean up engines by gently lifting sludge deposits off engine surfaces and dissolving them safely into the oil.
- Controls high-temperature oxidation and deposits
- Provides proven wear protection.
- Controls high-temperature oxidation and deposits.
- Low-friction formula helps improve gas mileage (SAE 5W-20, SAE 5W-30 and SAE 10W-30) compared to higher viscosities or the GF-4 and earlier service categories.
- Enhanced emission system protection compared to GF-4 and earlier service categories.

SPECIFICATIONS & APPROVALS

- Meets or exceeds API SN Service Classification (all grades)
- Meets or exceeds the highest U.S. standards for automotive engine wear protection
- Meets many manufacturers' U.S. warranty requirements
- Meets or exceeds ILSAC GF 5, GF 4, GF 3 and GF 2 requirements (SAE 5W-20, SAE 5W-30 and SAE 10W-30)
- Meets Ford WSS-M2C930-A and WSS-M2C945-A (SAE 5W-20)
- Meets Ford WSS-M2C929-A and WSS-M2C-946-A.
  (SAE 5W-30)
- Meets Chrysler MS 6395 (SAE 5W-20, SAE 5W-30, SAE 10W-30)
- Meets GM 6094M specification (SAE 5W-20, SAE 5W-30 and SAE 10W-30)

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

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TYPICAL PHYSICAL AND CHEMICAL PROPERTIES
PENNZOIL® MOTOR OIL

TEST	METHOD	TYPICAL RESULTS				
PENNZOIL® MOTOR OIL		5W-20	5W-30	10W-30	10W-40	20W-50
SAE Viscosity Grade	SAE J300	5W-20	5W-30	10W-30	10W-40	20W-50
API Service Category		SN	SN	SN	SN	SN
ILSAC		GF-5	GF-5	GF-5		
Gravity, °API	ASTM D-287	32.9	32.9	30.7	30.8	28.7
Specific Gravity @ 15.6°C(60°F)	ASTM D-287	0.861	0.860	0.872	0.872	0.884
Flash Point, °C	ASTM D-93	229	216	221	204	214
Pour Point, °C	ASTM D-97	-42	-42	-42	-42	-36
Color	ASTM D-1500	3.0	3.0	3.0	3.0	3.0
Viscosity						
@ 40°C, cSt	ASTM D-445	49.6	63.4	69.5	104.7	161.4
@ 100°C, cSt	ASTM D-445	8.6	10.6	10.5	15.4	17.6
Viscosity Index	ASTM D-2270	150	158	138	155	120
CCS Viscosity, cP (°C)	ASTM D-5293	5,540 (-30)	6,100 (-30)	6,120 (-25)	6,400 (-25)	7,900 (-15)
MRV Viscosity, cP (°C)	ASTM D-4684	18,100 (-35)	25,400 (-35)	21,100 (-30)	29,000 (-30)	21,200 (-20)
HT/HS Viscosity, cP	ASTM D-4683	2.6	3.0	3.1	3.8	4.6
Noack volatility, %	ASTM D-5800	14.7	14.9	14.5	14.8	5.4

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

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