

PENNZOIL[®] MOTOR OIL

PRODUCT DESCRIPTION

PENNZOIL[®] MOTOR OIL is a multi-viscosity motor oil with Active Cleansing Agents in SAE 5W-20, SAE 5W-30, and SAE 10W-30 viscosities continuously helps prevent dirt and contaminants from turning into performance robbing deposits, helping keep your engine clean to maintain responsiveness. It meets or exceeds the engine protection required by ILSAC GF-4 (5W-20, 5W-30, 10W-30) or API SM 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 5W-20, 5W-30 and 10W-30 meets or exceeds the demanding requirements of International Lubricant Standardization and Approval Committee (ILSAC) GF-4. ILSAC GF-4 comprises the latest industry standard for passenger car, van, light truck and sport utility vehicles (SUV's) engine oils for service fill oils of many US and Japanese OEM (original equipment manufacturer) vehicles. It meets or exceeds the performance requirements of API SM Service Classification.

PENNZOIL[®] MOTOR OIL multi-viscosity motor oil SAE 10W-40 and SAE 20W-50 are suitable for engines for which the owner's manual recommends API SM or prior API Service Classifications in these viscosity grades. This includes some older vehicles and some performance and modified vehicles. These products feature 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-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 and Japanese 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 – Historically used in some high performance and modified engine applications.

Technical Data Sheet



PENNZOIL® MOTOR OIL

FEATURES

- Active Cleansing Agents (SAE 5W-20, SAE 5W-30, SAE 10W-30)
- Specially formulated for stop and go driving

BENEFITS

- Helps keep engines clean
- Provides wear protection
- Controls high-temperature oxidation and deposits
- Helps protect emissions systems
- Low-friction formula helps improve gas mileage (SAE 5W-20, SAE 5W-30 and SAE 10W-30) compared to higher viscosities or older service categories
- Protects engines under severe driving conditions to help prolong engine life

SPECIFICATIONS & APPROVALS

- Meets or exceeds API SM 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-4, GF 3 and GF 2 requirements (SAE 5W-20, SAE 5W-30 and SAE 10W-30)
- Meets Ford WSS-M2C930-A (SAE 5W-20) and WSS-M2C929-A (SAE 5W-30)
- Meets Chrysler MS 6395R (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



TYPICAL PHYSICAL AND CHEMICAL PROPERTIES PENNZOIL[®] MOTOR OIL

TEST	METHOD	TYPICAL RES	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		SM	SM	SM	SM	SM	
ILSAC		GF-4	GF-4	GF-4			
Gravity, °API	ASTM D-287	32.7	31.4	30.3	30.2	29.0	
Specific Gravity @							
15.6°C(60°F)	ASTM D-287	0.862	0.863	0.872	0.875	0.884	
Flash Point, °C	ASTM D-93	229	216	221	204	214	
Pour Point, °C	ASTM D-97	-39	-39	-30	-30	-24	
Color	ASTM D-1500	3.0	3.0	3.0	3.0	3.0	
Viscosity							
$@ 40^{\circ}C, cSt$	ASTM D-445	47.3	63.9	69.7	96.9	158.3	
@ 100°C, cSt	ASTM D-445	8.4	10.5	10.53	14.0	17.6	
Viscosity Index	ASTM D-2270	150	158	135	147	122	
CCS Viscosity, cP (°C)	ASTM D-5293	5,100 (-30)	5,800 (-30)	6,170 (-25)	6,280 (-25)	7,060 (-15)	
MRV Viscosity, cP (°C)	ASTM D-4684	12,400 (-35)	15,900 (-35)	15,400 (-30)	16,700 (-30)	25,600 (-20)	
HT/HS Viscosity, cP	ASTM D-4683	2.6	3.0	3.1	3.7	4.6	
Noack volatility, %	ASTM D-5800	14.7	14.5	13.7	14.3	4.9	

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.