

PENNZOIL® START/STOP PROTECTION™ SAE 0W-20 FULL SYNTHETIC MOTOR OIL - MADE FROM NATURAL GAS

TECHNICAL DATA SHEET



Pennzoil® is the first motor oil made from natural gas, not crude. Pennzoil® Start/Stop Protection™ SAE 0W-20 full synthetic motor oil with PurePlus™ Technology is designed for UNBEATABLE ENGINE PROTECTION.

PERFORMANCE, FEATURES & BENEFITS

PurePlus™ Technology is our patented, revolutionary gas-to-liquid process which converts natural gas into a first-of-its-kind extremely high quality full synthetic base oil. Because our base oil is made from natural gas, it is crystal clear with fewer of the impurities found in crude oil, the start for many other traditional and synthetic motor oils. From that pure, clear base we add our high performance additives to create Pennzoil Start/Stop Protection™ with PurePlus™ Technology, motor oil designed for unsurpassed wear protection for start/stop driving.

- Protects against damaging effects of frequent short trips or start/stop driving
- Provides unsurpassed anti-wear protection¹
- Reduces deposits and sludge build up to improve engine performance²
- Optimized for modern start/stop engines¹
- Provides enhanced fuel economy³
- Provides wear protection for millions of stop starts⁴

This product is Carbon Neutral. The CO2 emissions of the lifecycle of this product have been offset with verified Nature Based Carbon Credits. For full details visit Pennzoil.com

¹ Based on Sequence IVA wear test using SAE 5W-30

² Based on Sequence IIH oxidation & deposit industry standard test and Sequence VH sludge test

³ Based on Sequence VIE fuel economy test

⁴ Based on internal data using taxi fleet trial

MAIN APPLICATIONS

Pennzoil Start/Stop Protection™ SAE 0W-20 Full Synthetic Motor Oil with PurePlus™ Technology is recommended for use in all vehicles requiring the use of SAE 0W-20 viscosity grade engine oils under start/stop driving conditions. Pennzoil Start/Stop Protection™ with PurePlus™ Technology can be mixed with other synthetic and mineral oils.

SAE 0W-20 viscosity grade oils are commonly recommended for use in many new vehicles with modern engine technology for maximum fuel economy and performance. It is also suitable for use and provides the same protection as SAE 5W-20 application.

Always consult your owners manual for the correct viscosity grade and performance recommendation required for your vehicle.

It is also suitable for use in modern direct injection turbocharged gasoline engines where it provides protection against damaging low-speed pre-ignition (LSPI).

SAE 0W-20 may not be suitable for use in older engines, so always consult your owner's manual for the correct viscosity grade and performance recommendation required for your vehicle.

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SPECIFICATIONS, APPROVALS & RECOMMENDATIONS

Meets or exceeds the following OEM requirements:

- Chrysler MS-6395
- Ford WSS-M2C-947-A
- Ford WSS-M2C947-B1

Exceeds the requirements of the following industry specifications:

- API SP

- API SP-Resource Conserving and all previous Categories
- ILSAC GF-6A and all previous ILSAC Standards

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

To find the right Pennzoil® product for your vehicles and equipment, please consult www.pennzoil.com to look-up the right motor oil recommendation using our oil selector.

TYPICAL PHYSICAL CHARACTERISTICS

Properties			Method	PENNZOIL® START/STOP PROTECTION™ SAE 0W-20 FULL SYNTHETIC MOTOR OIL
Viscosity Grade				0W-20
Service Category				API SP, API SP-Resource Conserving
ILSAC				GF-6A
ACEA				A1/B1
Density		kg/m ³	ASTM D4052	836
Flash Point		°C	ASTM D93	204
Pour Point		°C	ASTM D97	-48
Kinematic Viscosity	@ 40°C	cSt	ASTM D445	43.4
Kinematic Viscosity	@ 100°C	cSt	ASTM D445	8.6
Viscosity Index			ASTM D2270	182
CCS Viscosity	@-35°C	cP	ASTM D5293	5 670
MRV Viscosity	@-40°C	cP	ASTM D4684	16 200

These characteristics are typical of current production. While future production will conform to Pennzoil's® specification, variations in these characteristics may occur.

HEALTH, SAFETY & ENVIRONMENT

Health and Safety

Pennzoil® Start/Stop Protection™ SAE 0W-20 with PurePlus™ Technology is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Safety Data Sheet, which can be obtained from <https://www.epc.shell.com>

Protect the Environment

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

ADDITIONAL INFORMATION

Advice

Advice on applications not covered here may be obtained from your Shell or Shell Lubricants distributor representatives or Shell technical helpdesk.