

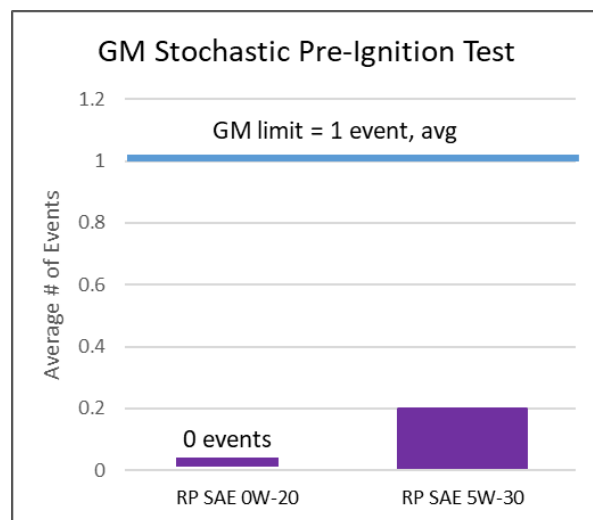
High Performance Motor Oil

API LICENSED MOTOR OIL

Royal Purple[®] High Performance Motor Oil combines premium base oils with proprietary additive technologies to create a high-performance synthetic engine oil that optimizes performance and protection. Royal Purple[®] High Performance Motor Oils carry the current API and ILSAC engine oil licenses, as well as the GM dexos1[™]* gasoline engine oil approval.

ILSAC GF-6 AND GM DEXOS1

Modern gasoline direct injection (GDI) engines have achieved levels of power and fuel economy never before possible in passenger car engines. As a result, smaller engines operate at much higher loads across all engine speeds. This has caused increased wear in critical areas of the engine, and created a destructive phenomenon called low-speed pre-ignition (LSPI). The unique, state-of-the-art additive technology in Royal Purple High Performance engine oils is designed specifically to address these issues, and help engines maintain performance and reliability.



PERFORMANCE ADVANTAGES

- **BETTER WEAR PROTECTION** - Enhanced additive technology prevents metal-to-metal contact beyond both GM dexos[®]1* and ILSAC GF-6A specifications
- **INCREASED PROTECTION AGAINST LSPI** - Advanced additive chemistry helps reduce Low Speed Pre-Ignition in today's turbocharged Gasoline Direct Injection engines.
- **INCREASED FUEL EFFICIENCY** - A low coefficient of friction results in optimized fuel efficiency (our 5W-30 meets the fuel economy requirements of a 0W-20 oil; our 0W-20 meets fuel economy requirements of a 0W-16)
- **BETTER PROTECTION FOR VEHICLE EXHAUST EMISSIONS EQUIPMENT** - Patented anti-wear additive chemistry minimizes the harmful effects exhaust gases pose to the catalyst
- **IMPROVED COMPATIBILITY WITH FUELS CONTAINING ETHANOL** - Patented additive technology prevents the white sludge and lubrication starvation that can occur with higher concentration gasoline-ethanol blends
- **SUPERIOR CORROSION PROTECTION** - No rust observed in standard industry testing

OEM SPECIFICATIONS

- SAE 0W-20:** Licensed and approved GM dexos1™ Gen 3, API SP Resource Conserving and ILSAC GF-6A
Meets Chrysler FCA US MS-6395, Ford WSS-M2C962-A specifications
- SAE 5W-20:** Licensed API SP Resource Conserving and ILSAC GF-6A
Meets Chrysler FCA US MS-6395, Ford WSS-M2C960-A specifications
- SAE 5W-30:** Licensed and approved GM dexos1™ Gen 3, API SP Resource Conserving and ILSAC GF-6A
Meets Chrysler FCA US MS-6395, Ford WSS-M2C961-A specifications
- SAE 10W-30:** Licensed API SP Resource Conserving and ILSAC GF-6A
Meets Chrysler FCA US MS-6395, GM 6094M specifications

Typical Physical Properties					
Property	Test Method	0W-20	5W-20	5W-30	10W-30
Viscosity @ 40°C, cSt	ASTM D445	45.8	46.1	62.4	61.6
Viscosity @ 100°C, cSt	ASTM D445	8.6	8.2	10.5	10.1
Viscosity Index	ASTM D2270	168	153	159	150
Cold Crank Simulator, cP	ASTM D5293	5,729 @-35°C	4,487 @-30°C	5,719 @-30°C	3,637 @-25°C
HTHS, @150°C, cP	ASTM D5481	2.7	2.6	3.1	3.2
Flash Point, °C (°F)	ASTM D92	232 (450)	227 (440)	238 (460)	243 (470)
Pour Point, °C (°F)	ASTM D97	-47 (-53)	-48 (-54)	-45 (-49)	-45 (-49)
TBN, mg KOH	ASTM D2896	8.9	8.9	8.6	8.7