

TECH DATA SUPREME™ HP HIGH MILEAGE MULTIGRADE MOTOR OILS

INTRODUCTION

SUPREME™ HP HIGH MILEAGE motor oils are specifically designed to meet the needs of vehicles with higher mileage. They are formulated to improve ring sealing in the piston-liner interface, thereby reducing engine blow-by and helping to prevent added sludge deposits. Continuous use of high mileage oil helps maintain engine cleanliness, which also supports a reduction in engine blow-by. This combination results in more power for the driver. SUPREME HP HIGH MILEAGE motor oils will pamper high mileage vehicles, protecting vital engine components and aiding performance as the miles add on.

SUPREME HP HIGH MILEAGE motor oils start with a pure advantage. They are formulated using high quality, ultra pure base oils. The synthetic blend formulations, in combination with leading edge additive technology, are designed to clean up the engine and boost power lost from blow-by, and deliver additional benefits for higher mileage engines.

SUPREME HP HIGH MILEAGE motor oils are formulated to exceed the latest API Service Classification for gasoline engines, API SQ with Resource Conserving, as well the latest ILSAC GF-7A standard.

FEATURES AND BENEFITS

Extended Engine Life

- Top tier additive significantly improves sludge clean-up
- Reduced engine blow-by improves power to the driver
- Outstanding protection against wear, rust and corrosion
- · Bearing life greatly extended
- Minimizes wear due to stop-start driving
- Protects against low speed pre-ignition (LSPI) and accelerated timing-chain wear in GDI/TGDI engines

Exceptional Resistance to High Temperature Thermal Breakdown

- Cleaner running engines
- Reduces formation of varnish, sludge and carbon on engine parts
- Protects turbochargers from deposit formation
- Minimizes piston-ring sticking
- Improves lubrication because oil-ways stay clean

Outstanding Low Temperature Fluidity

- Permits easier unaided cold weather starts
- Reduces wear during low temperature start-up and operation

Reduced Oil Consumption

- Low evaporation loss results in less oil top-up
- · Verified seal compatibility helps prevent leaks

Compatible with High Ethanol Fuels (up to E85)

- · Protects against engine corrosion
- Prevents water separation

Protection of Exhaust Emission Control Systems

 Formulated to meet reduced phosphorus and sulphur levels, and to provide reduced phosphorus volatility in order to protect and extend the life of emission control systems

Petro-Canada Lubricants specialty fluids, lubricants and greases have an advantage in quality and performance.

That's because our formulas are created and reviewed by an expert team of Research & Development specialists who ensure our finished products deliver to the specifications we demand and the performance standards our customers need.

IMPROVED FUEL ECONOMY PERFORMANCE

SUPREME HP HIGH MILEAGE motor oils meet or exceed the ILSAC GF-7A requirements for fuel economy improvement and fuel economy retention, which surpass the previous generation of ILSAC GF-6 motor oils. They not only provide better initial fuel economy, but they excel at maintaining it over the oil drain interval.

APPLICATIONS

SUPREME HP HIGH MILEAGE motor oils are recommended for year-round use in all gasoline powered vehicles. SUPREME HP HIGH MILEAGE motor oils meet or exceed warranty requirements for North American and Asian vehicles where ILSAC GF-7A or API SQ engine oils are recommended. They are fully back serviceable to previous ILSAC and API performance ratings including ILSAC GF-6 and previous API SP/SN/SN PLUS.

SUPREME HP HIGH MILEAGE motor oils are fully compatible with all other synthetic and conventional motor oils. However, for best results and performance, we recommend a complete oil and filter change when switching to SUPREME HP HIGH MILEAGE oils.

Always consult owner's manual to select the appropriate viscosity grade and approval level.

APPROVALS AND RECOMMENDATIONS

- ★ Approved or Licensed
- Suitable For Use
- ✓ Meets Specifications

Products	SUPREME HP HIGH MILEAGE				
	5W-20		5W-30		
energy	-	esource erving	*	SQ Resource Conserving	
AMERICAN PETROLEUM INSTITUTE	. /	esource erving*	1	SP Resource Conserving*	
11.040	★ GF-7	A	*	GF-7A	
ILSAC	✓ GF-6	A*	1	GF-6A*	
CHRYSLER	• MS-6	395	•	MS-6395	
Fird	✓ WSS	-M2C970-A1	1	WSS-M2C971-A1	
ASIAN OEMs	Meets specifications for Asian OEMs (including, but not limited to, Honda, Hyundai, Kia, Mazda, Nissan, Toyota) where ILSAC GF-x and/or API Sx is listed as the recommended lubricant in the OEM owner's manual.				

^{*} back-serviceable

TYPICAL PERFORMANCE DATA

Posterior	ASTM	SUPREME HP HIGH MILEAGE		
Property	TEST Method	SAE 5W-20	SAE 5W-30	
Density, kg/L @ 15°C	D4052	0.855	0.854	
Colour	D1500	<3.0	<3.0	
Flash Point, COC, °C / °F	D92	200/392*	198/388*	
Pour Point, °C / °F	D5950	-45/-49	-42/-44**	
Kinematic Viscosity, cSt @ 40°C cSt @ 100°C	D445	50.2 8.5	63.1 10.1	
Viscosity Index	D2270	147	146	
Cold Cranking Viscosity, cP @ °C / °F	D5293	5850 @ -30/-22	5800 @ -30/-22	
Borderline Pumping Viscosity, cP @ °C / °F	D4684	16000 @ -35/-31	16500 @ -35/-31	
Volatility (Noack), % loss	D5800	11.9	12.1	
Sulphated Ash, % wt.	D874	0.70	0.70	
Sulphur, % wt	D4294	0.26***	0.26***	
Phosphorus, % wt	D4951	0.075	0.075	
Base Number, (BN), mg KOH/g	D2896	7.8	7.8	
High-Temperature High-Shear (HTHS) Viscosity, cP @ 150°C	D4683	2.6	3.0	

The values quoted above are typical of normal production. They do not constitute a specification.

Learn more about us: petrocanadalubricants.com

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Committed to the disciplined operation of our business.



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^{*} Measured using D7094 closed cup method.

^{**} Measured using D5949.
*** Measured using D4951.