

TECH DATA SUPREME™ SYNTHETIC MULTIGRADE MOTOR OILS

INTRODUCTION

SUPREME™ SYNTHETIC Motor Oils, our best and most advanced motor oils, are designed to provide exceptional lubrication for the engines of today's gasoline and ethanol (up to E85) fuelled passenger cars, vans, CUVs, SUVs and light duty trucks. With today's high-powered engines, SUPREME SYNTHETIC Motor Oils can provide long engine life through enhanced lubrication and protection of critical engine parts. They also provide enhanced protection for the latest emission control systems, turbochargers and gasoline direct injected engines.

SUPREME SYNTHETIC Motor Oils start with a pure advantage. They are formulated using Petro-Canada base oils, which are among the purest base oils in the world. We use the HT Purity Process to remove performance-hindering impurities. Our base oils are 99.9% pure. That purity can help maximize the performance of our motor oils. In combination with leading-edge additive technology, they deliver exceptional resistance to thermal breakdown, outstanding low temperature fluidity, and excellent engine protection against wear and deposit formation under the most severe driving conditions.

SUPREME SYNTHETIC Motor Oils are specially formulated to exceed the latest API Service Classification for gasoline engines, API SP with Resource Conserving, as well the latest ILSAC GF-6 standards. SUPREME SYNTHETIC 0W-20, 5W-20 and 5W-30 are also designed to exceed GM's dexos1TM Gen 2 global gasoline engine oil specification. Our oils feature advanced formulations to protect gasoline direct injected and turbocharged direct injected engines from accelerated timing-chain wear and harmful damage caused by abnormal combustion events that can sound like engine "knocking".

FEATURES AND BENEFITS

Extended Engine Life

- Outstanding protection against wear, rust and corrosion
- Outstanding turbo-deposit control
- · Bearing life greatly extended
- Minimizes wear due to stop-start driving
- Improves engine performance through excellent aeration control
- Protects against low speed pre-ignition (LSPI) and accelerated timing-chain wear in GDI/TGDI engines

Our Best Resistance to High Temperature Thermal Breakdown

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

Our Best 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 to 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 starts with the HT purity process to produce water-white, 99.9% pure base oils. The result is a range of lubricants, specialty fluids and greases that deliver maximum performance for our customers.



IMPROVED FUEL ECONOMY **PERFORMANCE**

SUPREME SYNTHETIC Motor Oils meet or exceed the ILSAC GF-6 requirements for fuel economy improvement and fuel economy retention, which surpass previous generation ILSAC GF-5 motor oils. They not only provide better initial fuel economy, but they are better at maintaining it over the oil drain interval.

APPLICATIONS

SUPREME SYNTHETIC Motor Oils are recommended for yearround use in gasoline, gasoline containing ethanol (up to E85), propane and compressed natural gas (CNG) fuelled engines. SUPREME SYNTHETIC Motor Oils meet or exceed new car warranty requirements for North American and Asian vehicles where ILSAC GF-6 or API SP engine oils are recommended. They are fully back serviceable to previous ILSAC and API performance ratings including ILSAC GF-5 (excluding SAE 0W-16) and API SN, SN PLUS.

SUPREME SYNTHETIC Motor Oils are fully compatible with all other synthetic and conventional motor oils.

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

PETRO-CANADA SUPREME™ SYNTHETIC

MOTOR OILS RECOMMENDED APPLICATIONS ■Approved or Licensed Meets Suitable for Use **SAE Viscosity Grade** 0W-16 0W-20 0W-30 5W-20 5W-30 10W-30 **API** SP SP Resource Conserving SN, SN Resource Conserving, SN PLUS* **ILSAC** GF-6A GF-6B GF-5* Chrysler MS-6395 Ford WSS-M2C960-A1 WSS-M2C961-A1 WSS-M2C962-A1 WSS-M2C963-A1 **General Motors** GM dexos1™ Gen 2 D10380HG024 D130EAAF024 D10381HG024 **Asian OEMs** Honda, Hyundai, Kia, Mazda, Toyota

dexos1™ Gen 2 supercedes dexos1® (First Generation), GM6094M and GM4718M

The dexos® specification and trademark are exclusive to General Motors, LLC.

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

back-serviceable

TYPICAL PERFORMANCE DATA

PROPERTY	ASTM TEST Method	PETRO-CANADA SUPREME SYNTHETIC					
		SAE 0W-16	SAE 0W-20	SAE 0W-30	SAE 5W-20	SAE 5W-30	SAE 10W-30
Density, kg/L @ 15°C	D4052	0.844	0.845	0.842	0.845	0.845	0.849
Colour	D1500	3.0	<3.0	2.5	3.0	<3.0	2.5
Flash Point, COC, °C / °F	D92	219 / 426	219 / 426	235 / 455	219 / 426	224 / 435	229 / 444
Pour Point, °C / °F	D5950	-45 / -49	-45 / -49	-42 / -44	-45 / -49	-45 / -49	-45 / -49
Kinematic Viscosity cSt @ 40°C cSt @ 100°C	D445	39.4 7.6	44.2 8.3	54.8 10.1	45.3 8.4	64.1 11.3	60.8 10.2
Viscosity Index	D2270	164	164	174	163	171	156
Cold Cranking Viscosity, cP @ °C / °F	D5293	5000 @ -35 / -31	5600 @ -35 / -31	5600 @ -35 / -31	3500 @ -30 / -22	3800 @ -30 / -22	3700 @ -25 / -13
Borderline Pumping Viscosity, cP @ °C / °F	D4684	15000 @ -40 / -40	17000 @ -40 / -40	22000 @ -40 / -40	8500 @ -35 / -31	13000 @ -35 / -31	8900 @ -30 / -22
Volatility (Noack), % loss	D5800	10.9	11.8	11.1	10.0	10.4	7.3
Sulphated Ash, % wt.	D874	0.94	0.94	0.73	0.90	0.94	0.92
Sulphur, mass %	D4294	0.28	0.28	0.28	0.28	0.28	0.28
Phosphorus, mass %	D4951	0.08	0.08	0.08	0.08	0.08	0.08
Base Number, (BN), mg KOH/g	D2896	8	7	7	8	8	8
High-Temperature High-Shear (HTHS) Viscosity, cP @ 150°C and 1E+06/s	D4683	2.4	2.6	3.0	2.6	3.3	3.2

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

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Committed to the disciplined operation of our business.



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