Tech Data

PETRO CANADA LUBRICANTS

SUPREME™ SYNTHETIC Multigrade Motor Oils

Introduction

Petro-Canada 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 service, API SN with Resource Conserving, as well the latest ILSAC GF-5 specification. SUPREME SYNTHETIC OW-20 and 5W-30 are also designed to exceed GM's dexos1™ Gen 2 global gasoline engine oil specification. Our oils feature new and advanced formulations to protect gasoline direct injected engines and turbocharged direct injected engines from harmful damage due to 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 enhanced aeration control
 - Protects against low speed pre-ignition (LSPI)

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
- Enhanced 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

Improved Fuel Economy Performance

SUPREME SYNTHETIC Motor Oils meet or exceed the **ILSAC GF-5** requirements for fuel economy improvement and fuel economy retention versus previous generation ILSAC GF-4 motor oils. They not only provide better initial fuel economy, but they are better at maintaining it over the oil drain interval.

What is the HT difference?

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.



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

Applications

SUPREME SYNTHETIC Motor Oils are recommended for year-round use in gasoline, high 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-5 or API SN engine oils are recommended. They are fully back serviceable to all previous ILSAC and API performance ratings including ILSAC GF-4 and API SM.

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.

Petro-Canada SUPREME™ Synthetic Motor Oils Recommended Applications

■ Approved or Licensed □

Meets

SAE Viscosity Grade	0W-20	0W-30	5W-20	5W-30	10W-30
API		_			
SN	•		•	•	•
Resource Conserving	•		•	•	
SM*					
ILSAC					
GF-5	•	•	•	•	•
GF-4*					
Chrysler					
MS-6395					
Ford					
WSS-M2C945-A					
WSS-M2C946-A					
WSS-M2C947-A					
WSS-M2C953-A1					
General Motors					
GM dexos1 [™] Gen 2	D10380HG024			D10381HG024	
Asian OEMs					
Honda, Hyundai, Kia, Mazda					

^{*} back-serviceable

dexos1[™] Gen 2 supercedes dexos1[®] (First Generation), GM6094M and GM4718M The dexos[®] specification and trademark are exclusive to General Motors, LLC.

Typical Performance Data

PROPERTY	TEST METHOD	PETRO-CANADA SUPREME SYNTHETIC						
		SAE OW-20	SAE OW-30	SAE 5W-20	SAE 5W-30	SAE 10W-30		
Density, kg/L @ 15°C	D4052	0.845	0.843	0.845	0.845	0.849		
Colour	D1500	2.7	2.5	2.4	2.7	2.5		
Flash Point, COC, °C / °F	D92	219 / 426	223 / 433	231 / 448	224 / 435	229 / 444		
Pour Point, °C / °F	D5950	-45 / -49	-45 / -49	-45 / -49	-45 / -49	-45 / -49		
Kinematic Viscosity cSt @ 40°C cSt @ 100°C	D445	44.2 8.3	56.0 10.4	43.6 8.1	64.1 11.3	60.8 10.2		
Viscosity Index	D2270	164	177	163	171	156		
Cold Cranking Viscosity, cP @ °C / °F	D5293	5600 @ -35 / -31	5500 @ -35 / -31	3300 @ -30 / -22	3800 @ -30 / -22	3300 @ -25 / -13		
Borderline Pumping Viscosity, cP @ °C / °F	D4684	17200 @ -40 / -40	21000 @ -40 / -40	8900 @ -35 / -31	13500 @ -35 / -31	8900 @ -30 / -22		
Volatility (Noack), % loss	D5800	11.8	11.3	10.1	10.4	7.3		
Sulphated Ash, % wt.	D874	0.94	0.83	0.89	0.94	0.92		
Sulphur, mass %	D4294	0.261	0.264	0.264	0.260	0.265		
Phosphorus, mass %	D4951	0.08	0.08	0.08	0.08	0.08		
Base Number, (BN), mg KOH/g	D2896	7.1	7.2	7.2	8.0	7.5		
High-Temperature High-Shear (HTHS) Viscosity, cP @ 150°C and 1E+06/s	D4683	2.6	3.1	2.7	3.3	3.2		

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

To order product or to learn more about how Petro-Canada Lubricants can help your business visit: **lubricants.petro-canada.com**or contact us at: **lubecsr@petrocanadalsp.com**

ISO 9001 ISO 14001 ISO/TS 16949

