# **Tech Data**



# 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 Plus with Resource Conserving, as well the latest ILSAC GF-5 specification (SAE OW-16 excluded). SUPREME SYNTHETIC OW-20, 5W-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 Plus engine oils are recommended. They are fully back serviceable to all previous ILSAC and API performance ratings including ILSAC GF-4 and API SN, 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-16	0W-20	0W-30	5W-20	5W-30	10W-30
API						
SN Plus	•	•	•	•	•	•
SN Resource Conserving	•	•	•	•	•	•
SN, SM*						
ILSAC						
GF-5						
GF-4*						
Chrysler						
MS-6395						
Ford						
WSS-M2C945-A/B1						
WSS-M2C946-A/B1						
WSS-M2C947-A/B1						
WSS-M2C953-A1						
General Motors						
GM dexos1 <sup>™</sup> Gen 2		D10380HG024		D130EAAF024	D10381HG024	
Asian OEMs						
Honda, Hyundai, Kia, Mazda, Toyota						

<sup>\*</sup> 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 0W-16	SAE OW-20	SAE OW-30	SAE 5W-20	SAE 5W-30	SAE 10W-30			
Density, kg/L @ 15°C	D4052	0.844	0.845	0.843	0.845	0.845	0.849			
Colour	D1500	3.0	<3.0	2.5	<2.5	<3.0	2.5			
Flash Point, COC, °C / °F	D92	219 / 426	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	-45 / -49			
Kinematic Viscosity cSt @ 40°C cSt @ 100°C	D445	39.4 7.6	44.2 8.3	56.0 10.4	43.6 8.1	64.1 11.3	60.8 10.2			
Viscosity Index	D2270	164	164	177	163	171	156			
Cold Cranking Viscosity, cP @ °C / °F	D5293	4940 @ -35 / -31	5620 @ -35 / -31	5500 @ -35 / -31	3270 @ -30 / -22	3780 @ -30 / -22	3280 @ -25 / -13			
Borderline Pumping Viscosity, cP @ °C / °F	D4684	14510 @ -40 / -40	17220 @ -40 / -40	21000 @ -40 / -40	8850 @ -35 / -31	13460 @ -35 / -31	8890 @ -30 / -22			
Volatility (Noack), % loss	D5800	10.9	11.8	11.3	10.1	10.4	7.3			
Sulphated Ash, % wt.	D874	0.94	0.94	0.83	0.89	0.94	0.92			
Sulphur, mass %	D4294	0.264	0.261	0.264	0.264	0.260	0.265			
Phosphorus, mass %	D4951	0.08	0.08	0.08	0.08	0.08	0.08			
Base Number, (BN), mg KOH/g	D2896	8.2	7.1	7.2	7.2	8.0	7.5			
High-Temperature High-Shear (HTHS) Viscosity, cP @ 150°C and 1E+06/s	D4683	2.4	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

