



## DURON SYNTHETIC™ HEAVY DUTY ENGINE OIL

### Introduction

Petro-Canada DURON SYNTHETIC are full synthetic all season heavy duty engine oils specially formulated to maximize reliability and minimize wear, particularly in extreme cold temperature conditions. DURON SYNTHETIC's technologically advanced formulation makes the product suitable for the low emission diesel engine designs (pre '07) such as cooled EGR and ACERT.

DURON SYNTHETIC 0W-30 & 5W-40 are specially formulated with unique high performance additive systems in combination with Petro-Canada's patented 99.9% pure synthetic base fluids. One of the purest base oils in the world. DURON SYNTHETIC is ideal for use in extended oil drain interval service. The keys to success in extending service intervals are good operating practices and maintenance programs. Contact your Petro-Canada technical representative for additional information and assistance.

### Features and Benefits

- **Excellent low temperature properties**
  - Enjoy faster cold-weather start-ups with less engine stress
  - Superior fluidity without sacrificing high temperature properties (5W-40)
  - Optimized low and high temperature properties (0W-30)
- **Extend equipment life and reduce operating costs**
  - Retains new oil quality longer
  - Excellent soot dispersion capability
  - Reduces engine and component wear for best year round protection (5W-40)
- **Reduce the risk of equipment failure**
  - Excellent pumpability means faster oil flow and reduced wear on start-up
- **Increase productivity and profitability**
  - Increased equipment durability

- Extend service intervals with confidence
- Potential to consolidate to one lubricant for year round use (5W-40)
- **Reduce fuel consumption**
  - Reduce unnecessary idling time. Shut down engines with confidence of restart in extreme cold temperatures
  - Enjoy potential fuel economy benefits that arise from lower viscous drag versus a 15W-40 engine oil

### Applications

SAE Grade	Current API Category
5W-40	CI-4 Plus, CI-4, CH-4/SL and previous categories
0W-30	CI-4 Additive System, CH-4, CG-4/SM and previous categories

#### Engine Service Classifications:

DURON SYNTHETIC 5W-40 meets the high temperature physical property requirements of a 15W-40 according to SAE J300 and API CI-4 Plus

DURON SYNTHETIC is formulated to meet or exceed the following diesel engine manufacturer standards: Mack EO-M, Mack EO-M Plus, Cummins CES 20078 (5W-40), 20076, Caterpillar ECF-1, Ford M2C171-D

DURON SYNTHETIC meets or exceeds the performance requirements of the following manufacturers - Caterpillar, Detroit Diesel (4 stroke), Navistar International, Allis-Chalmers, Case IH, Deere, Fiat-Allis, GMC, Deutz, Continental, Hino, Komatsu, Perkins.

#### Transmission and Hydraulic Systems

- Allison transmissions and torque converters where a C-4 fluid is specified
- Caterpillar powershift transmissions, semi-automatic transmissions and torque converters where a CD/TO-2 fluid is specified
- Clark powershift transmissions

#### What is the HT difference?

Petro-Canada starts with the patented 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.



- Excellent hydraulic fluids where an engine oil is specified

### Car and Light Duty Diesel Engines

DURON SYNTHETIC 5W-40 is suitable for use in diesel powered engines in smaller vehicles, including cars and light trucks where API CI-4 Plus, CI-4, CH-4, CF, or earlier specifications are required.

DURON SYNTHETIC 0W-30, blended with API CI-4 additive technology, is suitable for use in diesel powered engines in smaller vehicles, including cars

and light trucks where API CI-4, CH-4, CF, or earlier specifications are required.

### Gasoline Engines

DURON SYNTHETIC is suitable for use in most engines operating on gasoline or natural gas fuel. This includes passenger car and light duty truck applications where API SM or earlier specification is required.

## Typical Performance Data

PROPERTY	TEST METHOD	0W-30	5W-40
Flash Point, °C / °F	ASTM D92	231 / 448	219 / 426
Kinematic Viscosity cSt @ 40°C / SUS @ 100°F cSt @ 100°C / SUS @ 210°F	ASTM D445	64.0 / 324 11.5 / 65.1	95.4 / 485 15.5 / 80.9
Viscosity Index	ASTM D2270	175	173
High Temp/High Shear Viscosity, cP @ 150°C & 1E+106S-1	ASTM D4683	3.3	4.3
Cold Cranking Viscosity cP @ -30°C / -22°F cP @ -35°C / -31°F	ASTM D5293	3,192 5,651	6,187
Pour Point °C / °F	ASTM D5950	-51 / -60	-48 / -54
Pumping Viscosity cP @ -35°C / -31°F cP @ -40°C / -40°F	ASTM D4684	17,456	23,320 47,864
Sulphated Ash, % wt	ASTM D874	1.3	1.39
Sulphur, %	ASTM D4294	0.42	0.48
Phosphorus, %	ASTM D4951	0.12	0.15
Total Base Number (TBN), mg KOH /g	ASTM D2896	9.2	10.8

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

## Health and Safety

To obtain Material Safety Data Sheet (MSDS), contact one of Petro-Canada's TechData Info Lines.

## TechData Info Lines

If you would like to know more about Petro-Canada's DURON SYNTHETIC, or any other product in our complete line of quality lubricants, please contact us at:

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 - East (English) . . . . . Phone 1-800-268-5850  
 (French) . . . . . Phone 1-800-576-1686  
 Other Areas . . . . . Phone (416) 730-2408  
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