



## DURON™ SYNTHETIC HEAVY DUTY ENGINE OIL

### Introduction

Petro-Canada DURON SYNTHETIC are full synthetic all-weather 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 engine oils are formulated using one of the purest base oils in the world; the result of a patented HT purity process to produce 99.9% pure base oils. That purity helps maximize the effectiveness of the oil's soot controlling chemistry and high performance additive system. 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 representative for additional information and assistance.

### Features and Benefits

- **Advanced soot control**
  - Helps prevent soot agglomeration, which:
    - Minimizes soot related engine wear
    - Minimizes soot related viscosity increase, resulting in better maintenance of fuel economy and cold temperature performance and protection
    - Helps reduce filter plugging and better oil flow
- **Excellent high and low temperature properties**
  - Enjoy faster cold-weather start-ups with less engine stress
  - Superior fluidity without sacrificing high temperature properties
- **Extend equipment life and reduce operating costs**
  - Retains new oil quality longer
  - Reduces engine and component wear for excellent all-weather protection
- **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 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

#### What is the HT difference?

Petro-Canada starts with the patented HT purity process to produce crystal-clear, 99.9% pure base oils. The result is a range of lubricants, specialty fluids and greases that deliver maximum performance for our customers.



\*Extending drain intervals should always be undertaken in conjunction with a regular oil analysis program.

## Approvals and Recommendations

■ Approved  
□ Suitable For Use

Approvals	DURON SYNTHETIC 0W-30	DURON SYNTHETIC 5W-40
<b>API</b>		
API CI-4 PLUS		■
API CI-4		■
API CH-4	■	■
API SM	■	
API SL		■
<b>Caterpillar</b>		
Caterpillar TO-2	□	□
Caterpillar TO-2 / Allison C4	□	□
Caterpillar ECF-1-a	□	□
Caterpillar ECF-2		□
<b>Cummins</b>		
Cummins CES 20076	□	■
<b>Ford</b>		
Ford M2C171-C	□	□
Ford M2C171-D		□
<b>Mack</b>		
Mack EO-M / EO-M Plus	□	■
<b>Other</b>		
JASO MA	□	

## Applications

### 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 20076, Caterpillar, 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
- 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	ASTM TEST METHOD	DURON SYNTHETIC 0W-30	DURON SYNTHETIC 5W-40
Flash Point, °C / °F	D92	231	223
Kinematic Viscosity	D445		
cSt @ 40°C / SUS @ 100°F		61.3 / 311	95.5 / 486
cSt @ 100°C / SUS @ 210°F		11.1 / 63.6	15.5 / 80.5
Viscosity Index	D2270	176	172
High Temp/High Shear Viscosity cP @ 150°C	D4683	3.32	4.31
Cold Cranking Viscosity, cP @ °C / °F	D5293	5606 (-35 / -31)	6260 (-30 / -22)
Borderline Pumping Viscosity, cP @ °C / °F	D4684	17860 (-40/ -40)	23630 (-35 / -31)
Sulphated Ash, % wt.	D874	1.3	1.4
Total Base No. (TBN), mg KOH/g	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:

**Lubricants Head Office**  
**Petro-Canada Lubricants Inc.**  
2310 Lakeshore Road West  
Mississauga, Ontario  
Canada L5J 1K2



Canada - West . . . . . Phone 1-800-661-1199  
- East (English) . . . . . Phone 1-800-268-5850  
    (French) . . . . . Phone 1-800-576-1686  
Other Areas . . . . . Phone (416) 730-2408  
E-mail . . . . . lubecsr@suncor.com  
Website . . . . . lubricants.petro-canada.ca

**Petro-Canada Europe Lubricants Limited**  
**Wellington House, Starley Way**  
**Birmingham International Park**  
**Solihull, B37 7HB, United Kingdom**

Telephone . . . . . +44 (0) 121 781 7264  
Fax . . . . . +44 (0) 121 781 7401  
UK Website . . . . . www.petro-canada.co.uk  
German Website . . . . . www.petro-canada.de

**Petro-Canada America Lubricants**  
**980 North Michigan Avenue**  
**Suite 1400, #1431**  
**Chicago, Illinois**  
**USA 60611**

Phone . . . . . 1-888-284-4572  
Fax . . . . . 1-708-246-8994  
E-mail . . . . . email@petro-canadaamerica.com

**Petro-Canada Asia Pacific Holding Company Ltd.**  
**Jia Shi Lubricants Trading (Shanghai) Co. Ltd.**  
**1908 World Trade Tower**  
**500 Guangdong Road, Huangpu District**  
**Shanghai, China 200001**

Phone . . . . . +86-21-6362-0066  
Fax . . . . . +86-21-6362-0536  
E-mail . . . . . asiapacific@suncor.com  
Website . . . . . www.petrocanada.cn