



DURON™ MONOGRADE HEAVY DUTY ENGINE OILS

Introduction

Petro-Canada DURON Monograde Engine Oils are designed to lubricate engines in heavy duty service, fueled by diesel, gasoline, propane, or compressed natural gas (CNG). DURON Monograde Engine Oils are suitable for some highway equipment and a wide range of off-highway applications, such as mining, forestry, construction, and farming. They are also used in many stationary and marine applications.

Petro-Canada DURON Monograde Engine Oils are blended from 99.9% pure base oils manufactured using the HT purity process and advanced additive technology. Extensive testing including fleet trials in a variety of situations has clearly established the outstanding qualities of DURON Engine Oils.

Features and Benefits

- **Outstanding resistance to lubricant breakdown caused by high temperatures**
 - Reduces deposits of varnish, sludge and carbon on engine parts
 - Extends engine overhaul intervals
- **Outstanding soot dispersion**
 - Reduces wear due to abrasive soot particles
 - Minimizes deposits on pistons and rings
 - Improves lubrication because oil-ways stay clean
- **Superior anti-wear protection**
 - Reduces wear on rings, liners and valve-lifters
 - Increases bearing life
 - Extends engine overhaul intervals

Applications

Petro-Canada DURON Monograde Engine Oils are formulated to meet the following requirements:

Engine Service Classifications

SAE Grade	Former API Category	Also suitable for use where recommended
10W	CF	CD, SG
30	CF-2, CF/SJ	CF-4, CE, CD-II, CD, SH, SG
40	CF-2, CF/SJ	CD-II, CD, SH, SG
50	CF-2, CF	CD-II, CD, SG

U.S. Military Specifications

Meets the performance requirements of U.S. Military CID A-A-52306 (SAE 30 & 40 grades).

Diesel Engines

DURON Monograde Engine Oils meet the warranty requirements of the following manufacturers in the SAE grade recommended by the manufacturer:

Cummins, Mack, Detroit Diesel, Caterpillar (SAE 30 & 40 grades are suitable where Caterpillar 3600 is specified), John Deere, Navistar International, Allis-Chalmers, Case IH, Fiat-Allis, GMC, Volvo, White, Deutz, Continental, Hino, Komatsu, Perkins, Fairbanks Morse.

Gasoline Engines

DURON Monograde Engine Oils meet the requirements of API SJ and may be used in gasoline engines where monograde engine oil is recommended. Consult your owners manual.

Transmissions and Hydraulics

- Caterpillar powershift transmissions, semi-automatic transmissions and torque converters, where a TO-2 fluid is specified
- Allison transmissions and torque converters, where a C-4 fluid is specified
- Hydraulics - DURON 10W is an excellent hydraulic fluid, where an SAE 10W engine oil is specified
- Wet clutch transmissions, including motorcycles & all terrain vehicles where a JASO-MA is specified.

What is the HT difference?

Petro-Canada 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.



Marine and Stationary Engine Applications

DURON™ 30 & 40 are suitable for use in the following medium and high-speed marine engines, fueled by diesel or gasoline (where water separation is not required): Allis-Chalmers, B&W/Alpha, Buda, Caterpillar, Chrysler, Cummins, Daihatsu, John Deere, Detroit Diesel 2-stroke engines, Deutz, Dorman, English Electric, Fairbanks-Morse, Ford, Gardener, Hatz, Intrepid, Isuzu, Mack, MAN, Mitsubishi, Moteurs Baudouin, MTU, Murphy, Nissan, Nohab, Onan, Paxman, Ruston, Stork/Werkspoor, Volvo, Wartsilla/Wichman, Waukesha/Scania, White, Yanmar. DURON™ 30 is also approved for use with Simplex seals from ThyssenKrupp

Caution Regarding Marine Storage:

- Risk of water contamination of product. DURON™ Monograde Engine Oils accept minor water contamination, however gross contamination may result in problematic emulsions.

PROPERTY	TEST METHOD	DURON			
		10W	30	40	50
Flash Point, COC, °C/°F	D92	194 / 381	221 / 430	263 / 505	259 / 498
Kinematic Viscosity cSt @ 40°C cSt @ 100°C	D445	38.7	91.6	133.1	206
	D445	6.8	11.3	14.4	19.1
Viscosity Index	D2270	130	110	108	105
High Temp/High Shear Viscosity cP @ 150°C	D4683	2.3	3.4	4.2	5.2
Cold Cranking Viscosity, cP @ °C	D5293	3,640 @ -25	-	-	-
Pour Point, °C / °F	D5950	-33 / -27	-33 / -27	-30 / -22	-21 / -6
Borderline Pumping Viscosity, cP @ °C	D4684	7,490 @ -30	-	-	-
Sulphated Ash, % wt	D874	1.0	1.0	1.0	1.0
Base No. (BN), mg KOH/g	D2896	8.5	8.5	8.5	8.5

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

Health and Safety

To obtain Material Safety Data Sheets (MSDS), contact one of our TechData Info Lines.

TechData Info Lines

If you are an existing customer looking to place an order, please call a Customer Order Management Representative at:

Canada (English) Phone 1-800-268-5850
(French)..... Phone 1-800-576-1686
United States Phone 1-877-730-2369
Latin America/Europe/Asia Phone +1-866-957-4444

You can also e-mail us at lubecsr@suncor.com



If you would like to become a Petro-Canada lubricants customer and require more information about specialty fluids, oils and greases that can help maximize your equipment performance, savings and productivity, please contact us at:

North America Phone 1-866-335-3369
Europe Phone +44 (0) 121-781-7264
Germany Phone 0800-589-4751
China Phone +86 (21) 6362-0066

Visit us on the web at lubricants.petro-canada.com