PETRO-CANADA LUBRICANTS

A HOLLYFRONTIER BRAND

TECH DATA

SENTRON™ SP 40

PREMIUM STATIONARY GAS ENGINE OIL

INTRODUCTION

Petro-Canada Lubricants SENTRON SP 40 is a premium performance stationary gas engine oil (SGEO) specially formulated to meet the demanding requirements of high performance stationary gas engines operating with steel pistons.

SENTRON SP 40 is formulated with an advanced additive technology which helps to prevent harmful deposit formation in the top ring groove of steel piston engines operating with high piston temperatures and high brake mean effective pressure (BMEP). This, in turn, contributes to reduced wear on key engine parts, providing increased engine durability and longer engine life, which can lead to a reduction in overall operating costs.

SENTRON SP 40's exceptional alkalinity retention helps to maintain engine performance and durability while extending oil drain intervals. This means lower maintenance costs, less used oil to dispose of and a more efficient and profitable operation.

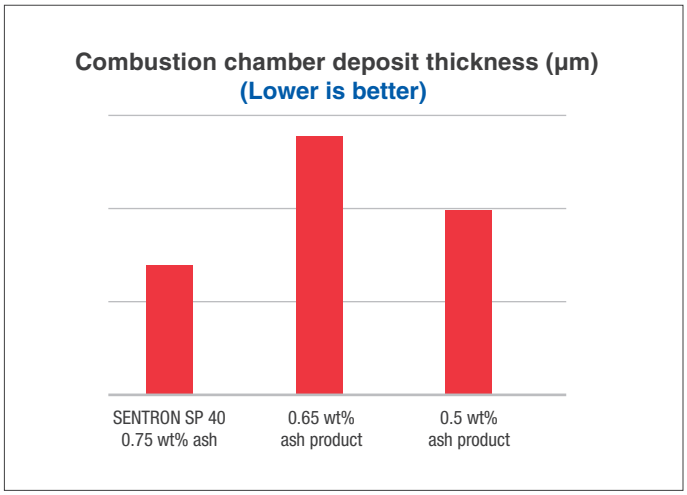
SENTRON SP 40 is formulated with Petro-Canada Lubricants ultra-pure HT Severely Hydrotreated base oils and highly advanced additive technology to help deliver a combination of extended oil life and excellent protection against top ring groove deposits.

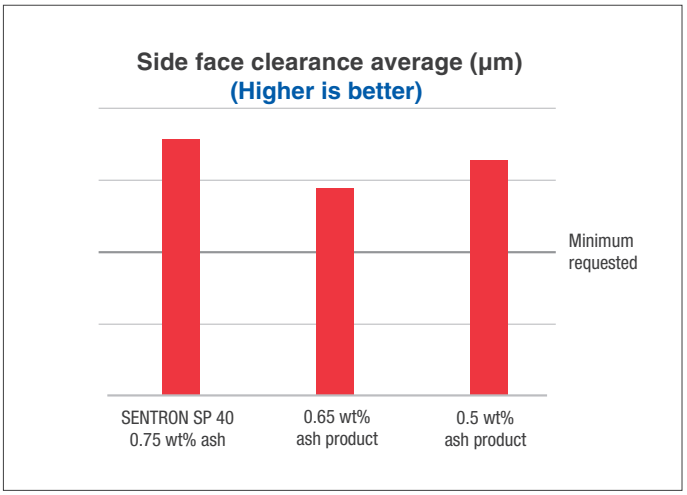
FEATURES AND BENEFITS

Outstanding protection against deposit formation:

- Significant reduction of combustion chamber deposits. In a severe engine-screening test at 24 bar BMEP, deposit thickness (piston crown & cylinder head) was even lower than a low ash (0.5 wt%) product.
- Outstanding top ring groove deposit control tendency. Formation of deposits in the top ring groove will potentially lead to ring sticking and piston seizure in high BMEP steel piston engines.

This capability has been assessed by measurement of heavy carbon deposits in the back of the top ring groove and side face clearance measurement at the top ring groove. In a severe engine-screening test at 24 bar BMEP, no heavy carbon deposit was detected in the back of the top ring groove. SENTRON SP 40 has also shown better side face clearance compared to other 0.65 wt% and 0.5 wt% ash products.

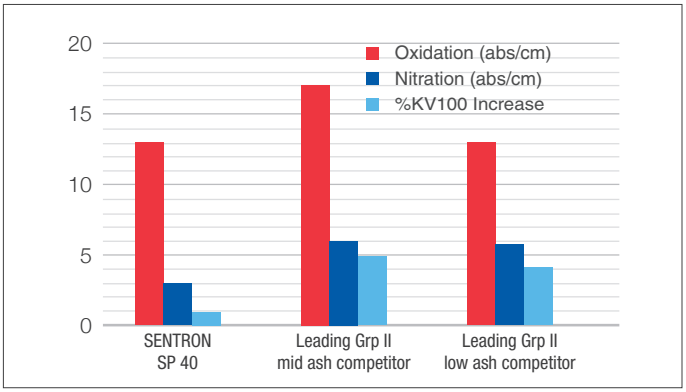




- In the same engine-screening test at 24 bar BMEP, SENTRON SP 40 showed no deposit build-up in the piston's second land. Formation of deposits at the piston's second land potentially leads to second ring sticking, bore polishing and liner scuffing.

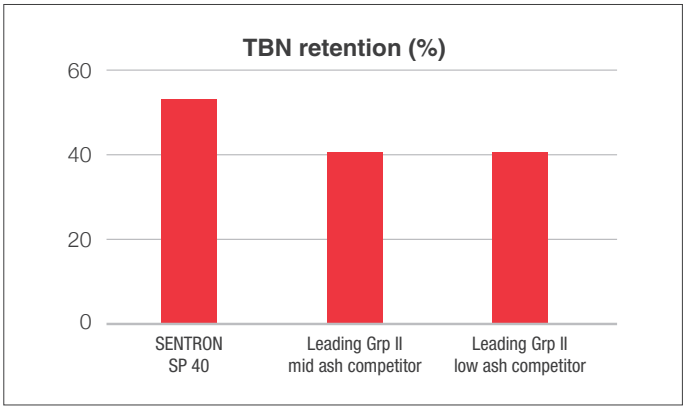
Outstanding oxidation/nitration resistance resulting in lower operational costs:

- SENTRON SP 40 showed significantly better aging resistance in terms of oxidation and nitration, as well as viscosity control versus leading competitors in severe oxidation tests (CEC-L48).



Outstanding capability to neutralize acids due to enhanced detergency:

- SENTRON SP 40 showed significantly better alkalinity reserve versus leading competitors in severe oxidation tests (CEC-L48). The greater the TBN retention, the greater the ability of the oil to neutralize acid, extend oil life and inhibit wear, corrosion and deposits.



Excellent anti-wear/anti-scuff protection which helps to:

- Reduce wear on piston rings, cylinder liners and bearings, prolonging engine life and reducing oil consumption.
- Control and minimize valve recession.

APPLICATIONS

SENTRON SP 40 is a premium performance, specialty stationary gas engine oil, specially formulated for high BMEP steel piston engines. It is suitable for use in 4-stroke engines using natural gas as well as pre-treated sewage/bio-gas fuels. SENTRON SP 40's 0.75 wt% Sulphated Ash content means that this product fits within the mid ash OEM specifications.

TYPICAL PERFORMANCE DATA

Property	ASTM Test Method	SENTRON SP 40
Ash Type	–	Mid Ash
Sulphated Ash, % wt	D874	0.75
SAE Grade	–	40
Flash Point, COC, °C / °F	D92	269 / 516
Kinematic Viscosity cSt @ 40°C cSt @ 100°C	D445	 124.2 13.3
Pour Point, °C / °F	D5950	-33 / -27
Total Acid Number*, mg KOH/g	D664	1.34
Total Base Number, mg KOH/g	D2896	6.60
Elemental analysis by ICP, %Ca	D4951	0.198
Elemental analysis by ICP, %P	D4951	0.027
Elemental analysis by ICP, %Zn	D4951	0.034
Sulfur, mass%	D4294	0.234

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

*Minor variations in typical test data are normal and should be expected under ASTM D664. To ensure maximum repeatability, used oil should be tested in the same lab under the same conditions that the fresh oil was tested.

Learn more about us: **lubricants.petro-canada.com**
Contact us: **lubecsr@hollyfrontier.com**

Committed to the disciplined operation of our business.

CERTIFIED
ISO 9001: 2015
ISO 14001: 2015
IATF 16949: 2016

Petro-Canada Lubricants Inc.
2310 Lakeshore Road W. Mississauga, Ontario, Canada L5J 1K2
lubricants.petro-canada.com

IM-8155E (2021.07)