



LUBRICANTS

AN HF SINCLAIR BRAND

TECH DATA

SENTRON™ LD 8000

PREMIUM STATIONARY GAS ENGINE OIL

INTRODUCTION

Petro-Canada Lubricants SENTRON™ LD 8000 is a premium performance, long life stationary gas engine oil (SGEO) specially formulated to lubricate stationary gas engines and reciprocating compressors.

SENTRON LD 8000's extended drain intervals can result in lower maintenance costs, less used oil to dispose of and a more efficient and profitable operation.

SENTRON LD 8000's exceptional performance is especially important in the severe service conditions common in compression, power generation and combined heat and power applications. Its outstanding anti-wear protection helps to minimize polish and wear of cylinder liners and wear of piston rings, while helping to reduce carbon buildup.

That can mean:

- Longer service intervals
- Cleaner engines with less wear
- Less downtime
- Less backfiring
- Fewer service calls

SENTRON LD 8000 is formulated with ultra-pure, high-quality base oils and highly advanced additive technology to help deliver a combination of extended oil life, and excellent control of engine deposits in many applications. Offering exceptional protection against wear and corrosion, SENTRON helps provide worry-free operation, increased engine durability and engine life, which can lead to a reduction in overall operating costs.

FEATURES AND BENEFITS

Revolutionary extended drain intervals can reduce maintenance and provide savings:

- Field tests show that SENTRON LD 8000 extends oil drain intervals by up to 300%* in Caterpillar G3500TALE engines, in a natural gas compression application in comparison to the leading global conventional competitor. This trial was completed with pipeline gas quality, under high load > 90% conditions. The extended drain interval helps to:
 - Reduce downtime and maximize production availability.
 - Lower operating costs by reducing maintenance costs.
 - Increase uptime, leading to a reliable business operation.

Longer oil life provides long-lasting equipment protection:

- Exceptional resistance to breakdown caused by oxidation and nitration.
- Outstanding capability to neutralize acids through greater Total Base Number (TBN) retention. The greater the TBN retention, the greater the ability of the oil to neutralize acid, extend drain life and inhibit wear, corrosion and deposits.
- Helps extend engine life by reducing varnish, sludge and carbon deposits as well as by inhibiting wear and corrosion.
- Helps improve engine performance.

Outstanding anti-wear/anti-scuff protection helps to:

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

Keeps engine parts clean by:

- Minimizing ring zone and valve stem deposits.
- Improving engine lubrication by maintaining clean oil-ways.
- Maximizing the time between major engine overhauls.
- Preventing corrosion.

Inventory consolidation:

- Specially formulated to enhance nitration control, SENTRON LD 8000 is suitable in both low and high nitrating engines, thus allowing the consolidation of products which apply to only one type of nitrating engine.
- SENTRON LD 8000 goes a step beyond SENTRON LD 5000 in terms of nitration control.

*Performance results may vary due to factors such as, but not limited to, engine optimization, load, fuel gas quality, proper maintenance, type of engine and application.

APPLICATIONS

SENTRON LD 8000 is a premium performance stationary gas engine oil specially formulated to lubricate industrial combustion engines running on natural gas as well as pre-treated sewage/ bio-gas and selective pre-treated process gases. It is suitable

for use in 4-stroke engines in both gas compression and power generation applications. SENTRON LD 8000's 0.52% sulphated ash content means that this product fits within the low ash OEM specification.

TYPICAL PERFORMANCE DATA

Property	ASTM Test Method	SENTRON LD 8000
Ash Type	–	Low Ash
Colour	D1500	4.5
Sulphated Ash, % wt	D874	0.52
SAE Grade	–	40
Flash Point, COC, °C / °F	D92	277 / 531
Kinematic Viscosity cSt @ 40°C /SUS @ 100°F cSt @ 100°C/SUS @ 210°F	D445	120.6 / 556.1 13.3 / 71.5
Pour Point, °C / °F	D5950	-27 / -17
Total Acid Number*, mg KOH/g	D664	0.86
Total Base Number	D2896	4.64
Elemental analysis by ICP, %Ca	D4951	0.139
Elemental analysis by ICP, %P	D4951	0.030
Elemental analysis by ICP, %Zn	D4951	0.036
Sulfur, mass%	D4294	0.288

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.

COMPATIBILITY

HF Sinclair's Research and Development team tested the compatibility of fresh oil samples of SENTRON LD 8000 with SENTRON LD 3000 and SENTRON LD 5000. The results of this analysis demonstrated that there should not be any issues in the field when mixing these products together. For more information on compatibility, please consult your Sales representative or an HF Sinclair Technical Services Advisor.

OPERATIONAL CONSIDERATIONS

SENTRON LD 8000 stationary gas engine oil with extended drain interval and oil life as well as excellent control of engine deposits and wear help provide worry-free operation and reduced cost to customers under normal recommended conditions. However, actual oil life is dependent upon system design and operating practices, and should be established by used oil analysis, according to engine manufacturers' recommendations. Our Petro-Canada Lubricants No-Nonsense Lubricants Warranty applies.

Learn more about us: lubricants.petro-canada.com
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Committed to the disciplined operation of our business.



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