

TECH DATA

COMPRO™ XL-S

COMPRESSOR FLUID

INTRODUCTION

Petro-Canada Lubricants COMPRO XL-S compressor fluids are premium performance lubricants designed to deliver synthetic like performance in rotary screw air compressors. COMPRO XL-S is formulated with ultra-pure, high quality base oils and specially selected combination of additives to work synergically to extend compressor fluid life with minimal carbon deposits or varnish formation. With excellent oxidation stability, corrosion, deposit control and low volatility, COMPRO XL-S delivers up to 8,000 hours of continuous worry-free service in rotary screw air compressors providing lubrication, sealing and effective heat removal for efficient compressor performance.

FEATURES AND BENEFITS

Excellent resistance to oxidative breakdown caused by exposure to air at high discharge temperatures

- Reduces oil thickening, maintaining good fluidity through pumps, lines, filters and actuators
- Controls build-up of acidic by-products that can accelerate oil deterioration and promote corrosion
- Controls build-up of sludge and varnish to ensure smooth operation through fine tolerances

Higher thermal stability reduces carbon deposit formation

- Improves compressor operating efficiency
- Reduces valve sticking and maintains heat transfer efficiency of intercoolers

Improved viscosity index and good low temperature properties

- Improves film thickness at elevated temperatures
- Better cold temperature fluidity for low temperature start-up

Good protection against wear

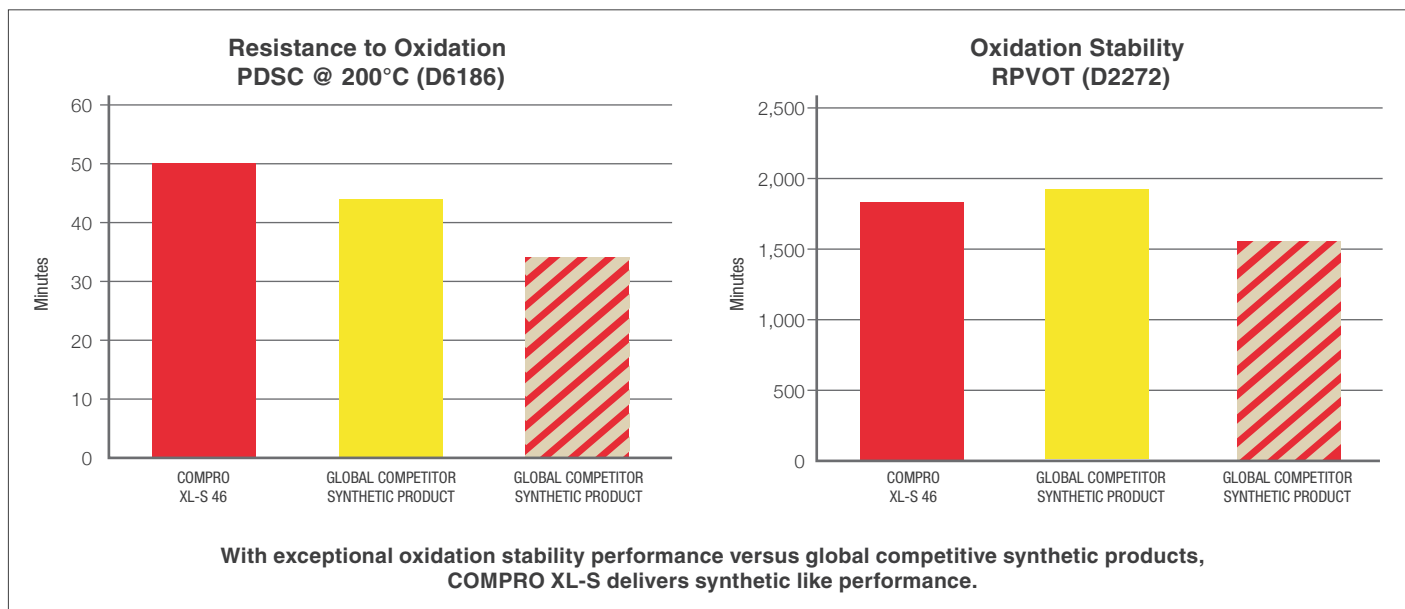
- Prolongs the service life of working components such as rotor bearings, vane tips, piston rings and liners

Protects against rust and corrosion

- Helps to extend component life, especially when running intermittent service in high humidity conditions
- Good water separation for water removal and to minimize emulsions

Low volatility reduces oil carry-over into the air system

- May reduce fluid consumption for reservoir top-up



APPLICATIONS

COMPRO XL-S compressor fluids are particularly recommended for rotary screw air compressors in continuous service operating at discharge air temperatures up to 85°C/185°F. Such rotary screw compressors may be run for up to one year (8,000 hours) in continuous operation. This is at least four times the life of conventional mineral oil based compressor fluids.

While particularly effective in rotary screw compressors, COMPRO XL-S can also be used in centrifugal compressors for up to two years at air discharge temperatures up to 50°C/122°F.

COMPRO XL-S is suitable for use in compressors that handle air and inert gases such as nitrogen, argon, hydrogen, neon, helium, carbon dioxide, carbon monoxide and blast furnace gas.

COMPRO XL-S 68, 100 and 150 meet the requirements of DIN 51506 VDL and can be used in reciprocating compressors for shorter duration.

COMPRO XL-S is suitable for use in all makes of compressors, including:

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|--------------------------|---------------------------|
| • ABAC | • Grimmer Schmidt |
| • Allis Chalmers | • Ingersoll Rand |
| • Atlas Copco | • Joy Manufacturing |
| • Ceccato | • Kaeser Compressors |
| • Champion Pacific | • Kellogg-American |
| • Chicago Pneumatic Tool | • Le Roi |
| • Compair Canada | • M&D Pneumatics |
| • Copper-Bressemer | • MAHLE |
| • Copper Industries | • Mark |
| • Cooper-Penjax | • Quincy Compressors |
| • Davey Compressors | • Schramm Inc. |
| • Dresser Industries | • Sullair Compressors |
| • Elliot Company | • Sundstrand Corp. |
| • Fuller Company | • Worthington Compressors |
| • Gardner Denver | |

All COMPRO XL-S compressor fluids are NSF H2 listed (no allowable food contact).

COMPRO XL-S compressor fluids are compatible with standard seal and hose materials used in most compressors.

COMPRO XL-S compressor fluids are also suitable for use in industrial vacuum pumps operating with a vacuum of >0.005 mBar.

NOTE: COMPRO XL-S should not be used in systems compressing wet or sour hydrocarbon gases. For these applications, Petro-Canada Lubricants line of natural gas compressor fluids are recommended.

NOTE: COMPRO XL-S must not be used in the compression of oxygen, or other chemically active gases such as chlorine or hydrogen chloride.

NOTE: DO NOT USE in breathing air apparatus or medical equipment.

OPERATIONAL CONSIDERATIONS

In order to realize the full benefits of COMPRO XL-S compressor fluids, it is advised to drain and flush the equipment system to minimize contamination with previous used oil prior to changing over to COMPRO XL-S. Please note that certain makes of compressors do not permit complete draining. If the drained oil is heavily oxidized, recharging with COMPRO XL-S may not result in optimum performance and fluid service life.

While COMPRO XL-S is fully compatible with most mineral and synthetic compressor fluids, it should not be mixed or contaminated with fluids containing polyalkylene glycols or silicones.

For complete instructions on cleaning varnished compressors or flushing and recharging the compressor with COMPRO XL-S, please consult with a Petro-Canada Lubricants Technical Services Advisor.

COMPRESSOR FLUID GRADE SELECTION & SERVICE LIFE

Compressor Type	Recommended Viscosity Grades	Fluid Service Life at Maximum Air Discharge Temperature
Rotary Screw	COMPRO XL-S 32, 46	8,000 Hours 85°C (185°F)
Rotary Vane	COMPRO XL-S 100, 150	1,000 Hours 85°C (185°F)
Reciprocating	COMPRO XL-S 68, 100, 150	500 Hours 150°C (302°F)
Centrifugal / Lobe	COMPRO XL-S 32	>16,000 Hours 50°C (122°F)

Note: The above are general guidelines only. Consult the OEM service manual for specific make/model recommendations. A Petro-Canada Lubricants Technical Services Advisor can help to refine these recommendations for a given application.

TYPICAL PERFORMANCE DATA

Property	ASTM Test Method	COMPRO XL-S				
		32	46	68	100	150
Viscosity, cSt @ 40°C cSt @ 100°C SUS @ 100°F SUS @ 210°F	D445	36.6 6.0 188.2 45.9	47.2 7.2 242.6 50.2	71.3 11.6 363.4 65.6	100.7 14.1 517.2 75.3	146.5 16.1 763.4 83.6
Viscosity Index	D2270	107	114	157	143	115
Flash Point, COC, °C / °F	D92	243 / 469	241 / 466	271 / 520	263 / 505	287 / 549
Pour Point, °C / °F	D5950	-42 / -44	-42 / -44	-36 / -33	-27 / -17	-24 / -11
Acid Number (AN), mg KOH/g	D664	0.15	0.14	0.13	0.11	0.14
Water Separability: mL @ 54°C / 129°F, (Minutes) mL @ 82°C / 180°F, (Minutes)	D1401	40-40-0 (5) –	40-40-0 (15) –	41-39-0 (15) –	– 41-39-0 (10)	– 40-40-0 (10)
Corrosion Protection: Copper Corrosion, 3h @ 100°C Rust B – Synthetic Sea Water	D130 D665B	1b Pass	1b Pass	1a Pass	1a Pass	1a Pass
Residue & Ash: Ramsbottom Carbon Residue, Mass %	D524	0.04	0.03	0.02	0.05	0.09
Foam Sequence I Foam Sequence II Foam Sequence III	D892	10 / 0 20 / 0 0 / 0	0 / 0 0 / 0 0 / 0	5 / 0 20 / 0 0 / 0	10 / 0 0 / 0 0 / 0	0 / 0 10 / 0 0 / 0

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

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



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