



## COMPRO\* XL-S COMPRESSOR FLUID

### Introduction

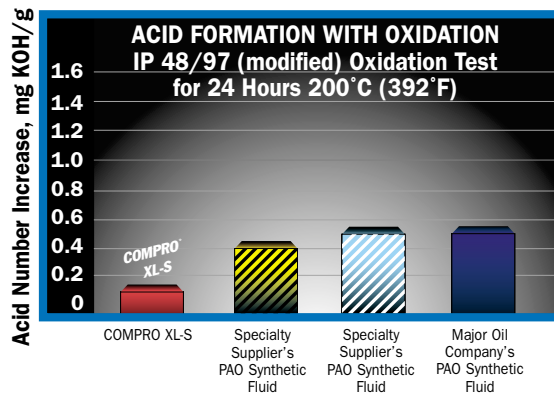
Petro-Canada's COMPRO\* XL-S Compressor Fluid is a premium quality lubricant specifically designed to extend fluid service life in rotary screw air compressor applications.

COMPRO XL-S is formulated with a blend of 99.9% pure base oils, produced using a patented HT purity process. These crystal clear fluids are free of impurities that can hinder lubricant performance. Utilizing more than 25 years of formulating experience, Petro-Canada fortifies these thermally stable fluids with a unique anti-oxidant technology to maximize resistance to fluid breakdown.

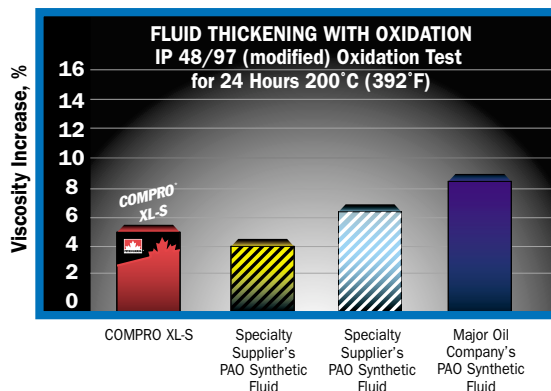
With equal or better resistance to thermal and oxidative breakdown versus leading PAO synthetic based fluids, COMPRO provides up to 8,000 hours or one year of continuous worry free service and can significantly reduce compressor operating costs.

### Features and Benefits

- **Resists oxidative breakdown better than leading synthetic PAO based fluids**
  - Better resistance to oxidative breakdown caused by exposure to air at high discharge temperatures
  - Keeps compressor components free of sludge and varnish to ensure trouble free operation and lower maintenance costs on fluid change-out
  - Extends oil change intervals up to 8,000 hours service in rotary screw compressors and 1,000 hours service in rotary vane compressors
  - Reduces oil thickening, which can improve compressor efficiency and lower energy consumption costs



*COMPRO XL-S Compressor Fluid provides stronger resistance to oxidative breakdown than leading Synthetic PAO based fluids. This level of performance provides up to 8,000 hours of continuous, worry-free service and the opportunity to significantly reduce operating costs.*



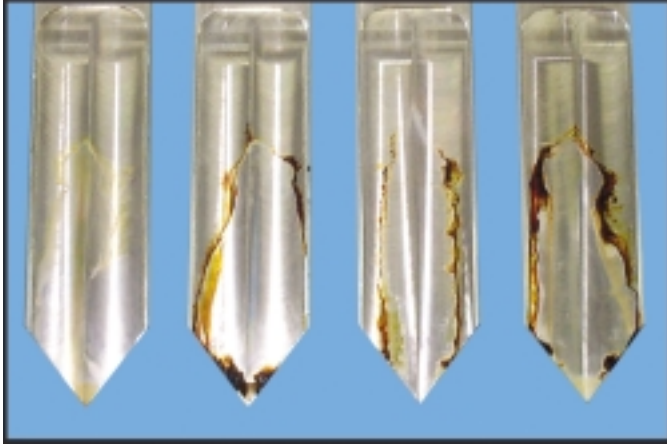
*COMPRO XL-S's stronger oxidation resistance also reduces oil thickening, which can improve compressor efficiency and lower energy consumption, costs.*

#### What is the HT difference?

Petro-Canada starts with the patented 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.



- **Higher thermal stability reduces carbon deposit formation and extends fluid life**
  - Improves compressor operating efficiency
  - Extends maintenance intervals for valves and intercoolers
  - Lowers maintenance costs



COMPRO XL-S    Specialty Supplier's PAO Synthetic    Specialty Supplier's PAO Synthetic    Major Oil Company's PAO Synthetic

*In panel coker testing at 260°C (500°F) COMPRO XL-S demonstrated stronger resistance to carbon deposit formation versus leading PAO synthetic based fluids. Less carbon build-up on compressor components improves operating efficiencies and saves on maintenance costs.*

- **Excellent protection against wear**
  - Prolongs the service life of working components
  - Can extend the time between compressor overhauls
  - Reduces overall maintenance costs
- **Protects against rust and corrosion**
  - Helps to extend component life, especially when running intermittent service in high humidity conditions
- **Low volatility reduces oil carry-over into the air system**
  - Reduces fluid consumption costs
- **Chemically inert and low in odour**
  - eliminates unpleasant odours experienced with di-ester based chemistries
  - does not damage painted surfaces

## Applications

While COMPRO XL-S Compressor Fluid may be used to lubricate and cool all types of rotary vane, reciprocating, centrifugal and lobe air compressors, it is specifically designed to significantly extend service life in rotary screw compressors. It is available in five ISO viscosity grades: 32, 46, 68, 100 and 150 to cover most compressor applications.

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 is suitable for use in all makes of compressors, including:

ABAC	GrimmerSchmidt
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	

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

COMPRO XL-S Compressor Fluid is 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's Compressor Oil RP, SPX Fluid or NGS Fluid is 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.**

## Operational Considerations

The full benefits of a change to COMPRO XL-S Compressor Fluid will only be realized by minimizing contamination with the previously used oil. Certain makes of compressors do not permit complete draining, so if the drained oil is heavily oxidized (shown by significant increase in the oil's total acid number and viscosity), 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 your compressor with COMPRO XL-S Compressor Fluid, consult with a Petro-Canada 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 your OEM service manual for specific make/model recommendations.

## Typical Performance Data

PROPERTY	TEST METHOD	COMPRO XL-S COMPRESSOR FLUID				
		32	46	68	100	150
Viscosity, cSt @ 40°C (SUS @ 100°F)	ASTM D445	38 (177)	47 (217)	68 (317)	102 (530)	143 (664)
cSt @ 100°C (SUS @ 210°F)	ASTM D445	6.2 (46)	7.0 (49)	8.9 (55)	11.4 (65)	14.9 (77)
Viscosity Index	ASTM D2270	108	107	101	97	104
Flash Point, °C (°F)	ASTM D92	230 (446)	246 (475)	245 (473)	260 (500)	270 (518)
Pour Point, °C (°F)	ASTM D97	-36 (-33)	-33 (-28)	-30 (-22)	-27 (-17)	-24 (-11)
Total Acid Number (TAN), mL KOH/g	ASTM D664	<0.1	<0.1	<0.1	<0.1	<0.1
Water Separability: mL at 54°C (129°F), minutes	ASTM D1401	41-39-0 (5)	41-39-0 (5)	41-39-0 (5)	-	-
mL at 82°C (180°F), minutes		-	-	-	43-37-0 (5)	43-37-0 (10)
Corrosion Protection:						
Copper Corrosion, 3h @ 100°C	ASTM D130	1b	1b	1b	1b	1b
Rust A – Distilled Water	ASTM D665	Pass	Pass	Pass	Pass	Pass
Rust B – Synthetic Sea Water	ASTM D665	Pass	Pass	Pass	Pass	Pass
Residue & Ash:						
Conradson Carbon Residue, %	ASTM D524	<0.1	<0.1	<0.1	<0.1	<0.1
Foam Sequence I	ASTM D892	10/0	10/0	10/0	10/0	10/0
Foam Sequence II		15/0	15/0	15/0	15/0	15/0
Foam Sequence III		10/0	10/0	10/0	10/0	10/0

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

## Health and Safety

COMPRO\* XL-S Compressor Fluid has no adverse affect on health provided it is used as directed. To obtain Material Safety Data Sheets (MSDS), contact one of our TechData Info Lines or visit our Web site at [www.petro-canada.com](http://www.petro-canada.com).

## TechData Info Lines

If you would like to know more about COMPRO\* XL-S Compressor Fluid or any other product in our complete line of quality lubricants, please contact us at:

**Petro-Canada  
Lubricants Centre  
385 Southdown Road  
Mississauga, Ontario  
L5J 2Y3**



**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@petro-canada.ca](mailto:lubecsr@petro-canada.ca)  
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