



COMPRO™ COMPRESSOR FLUID

Introduction

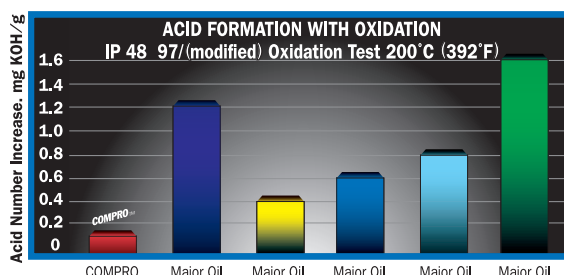
Petro-Canada's COMPRO™ Compressor Fluid is a premium quality lubricant specifically designed to provide long and highly reliable service life in industrial air compressor applications.

COMPRO's unique chemistry starts 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 specially selected additives to provide strong protection against oxidative breakdown, wear and corrosion.

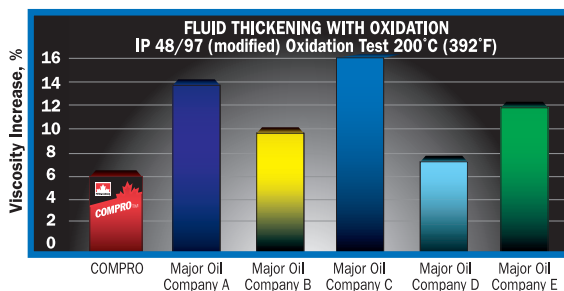
With stronger resistance to sludge and varnish formation versus leading mineral oils, COMPRO provides worry-free operation and can reduce overall compressor maintenance costs.

Features and Benefits

- **Resists oxidative breakdown better than leading mineral oil based fluids**
 - Strong 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
 - Provides oil change intervals of up to 2,000 hours service in rotary screw compressors, and 500 hours service in reciprocating and rotary vane compressors
 - Reduces oil thickening, which can improve compressor efficiency and lower energy consumption costs.
- **High thermal stability reduces carbon deposit formation**
 - Improves compressor efficiency
 - Extends maintenance intervals for valves and intercoolers
- **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 cost



COMPRO compressor fluid provides stronger resistance to oxidative breakdown than leading mineral oil based fluids. Stronger oxidation resistance keeps components free of sludge and varnish for trouble free operation and lower maintenance costs due to fewer fluid change-outs.



COMPRO'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.



Applications

COMPRO Compressor Fluid is designed to lubricate and cool all types of rotary screw, rotary vane, reciprocating, centrifugal and lobe compressors. It is available in four ISO viscosity grades: 32, 68, 100 and 150 to cover most compressor applications.

COMPRO Compressor Fluids are 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 Compressor Fluids are suitable for use in all makes of compressors, including:

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

COMPRO Compressor Fluids are also suitable for use in industrial vacuum pumps operating with a vacuum of >0.005 mBar.

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

Compressor Fluid Grade Selection & Service Life

Compressor Type	Recommended Viscosity Grades	Fluid Service Life at Maximum Air Discharge Temperature		
Rotary Screw	COMPRO 32	2,000 Hours	85°C	(185°F)
Rotary Vane	COMPRO 100, 150	500 Hours	85°C	(185°F)
Reciprocating	COMPRO 68, 100, 150	500 Hours	150°C	(302°F)
Centrifugal / Lobe	COMPRO 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.

COMPRO Compressor Fluids are designed for air compressors running under moderate conditions. For severe service or special compressor applications, we recommend the following:

COMPRO XL-S Compressor Fluid

- Specially formulated to extended fluid life in rotary screw compressors
- Provides up to 8,000 hours (4X longer) service life in rotary screw compressors operating at air discharge temperatures of up to 85°C (185 °F)
- Provides up to 1,000 hours (2X longer) service life in rotary vane compressors operating at air discharge temperatures of up to 85°C (185°F)
- Available in ISO 32, 46, 68, 100 and 150 viscosity grades

COMPRO XL-R Compressor Fluid

- Specially formulated to extend fluid life and reduce maintenance costs in reciprocating compressors

- Provides up to 2,000 hours (4X longer) service life in reciprocating compressors operating at air discharge temperatures of up to 150°C (302°F)
- Available in an ISO 68 viscosity grade

COMPRO™ Synthetic Compressor Fluid

- Specially formulated to extended fluid life in rotary screw compressors operating under extreme conditions, or where the risk of compressor downtime cannot be compromised
- Provides up to 8,000 hours (4X longer) service life in rotary screw compressors operating at air discharge temperatures of up to 105°C (221 °F)
- Available in an ISO 32/46 viscosity grade

Operational Considerations

The full benefits of a change to COMPRO 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 may not result in optimum performance and fluid service life.

While COMPRO, COMPRO XL-S and COMPRO XL-R Compressor Fluids are fully compatible with most

mineral and synthetic compressor fluids, they should not be mixed or contaminated with fluids containing polyalkylene glycols or silicones. COMPRO Synthetic Compressor Fluid is compatible with polyalkylene glycols but should not be mixed with mineral oils or silicones.

For complete instructions on cleaning varnished compressors, or flushing and recharging your compressor with COMPRO Compressor Fluid, consult with a Petro-Canada Technical Services Advisor.

Typical Performance Data

PROPERTY	TEST METHOD	COMPRO COMPRESSOR FLUID			
		32	68	100	150
Viscosity, cSt @ 40°C (SUS @ 100°F) cSt @ 100°C (SUS @ 210°F)	ASTM D445 ASTM D445	36 (183) 5.7 (45)	68 (352) 8.7 (55)	101 (527) 11.2 (65)	150 (789) 14.3 (77)
Viscosity Index	ASTM D2270	97	99	97	93
Flash Point, °C (°F)	ASTM D92	215 (419)	238 (460)	260 (500)	264 (507)
Pour Point, °C (°F)	ASTM D97	-39 (-38)	-30 (-22)	-18 (0)	-12 (10)
Total Acid Number (TAN), mL KOH/g	ASTM D664	0.3	0.3	0.3	0.3
Water Separability: mL at 54°C (129°F), minutes mL at 82°C (180°F), minutes	ASTM D1401	42-38-0 (10) –	42-38-0 (15) –	– 42-38-0 (15)	– 42-38-0 (15)
Corrosion Protection: Copper Corrosion, 3h @ 100°C Rust A – Distilled Water Rust B – Synthetic Sea Water	ASTM D130 ASTM D665 ASTM D665	1b Pass Pass	1b Pass Pass	1b Pass Pass	1b Pass Pass
Residue & Ash: Conradson Carbon Residue, %	ASTM D189	<0.1	<0.1	<0.1	<0.1

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

Health and Safety

COMPRO 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 lubricants.petro-canada.ca

TechData Info Lines

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

**Petro-Canada
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385 Southdown Road
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