

Compressor fluids for commercial refrigeration systems.



Put the **freeze** on maintenance costs with REFLO.™  
Performance you can trust.



# COMPRESSOR FLUIDS FOR EVERY TECHNOLOGY.

## Committed to developing world-class compressor fluids for over 20 years.

The Food Processing and Cold Warehousing industries, along with other cold applications like ice rinks, present unique challenges for lubricants. Uninterrupted performance is critical to maintain product shelf life or reliable ice surface for sports. With increasing pressure to improve energy efficiency and reduce costs, maintenance managers face even greater lubricant demands.

These are just the kinds of challenges that Petro-Canada thrives on. We have been committed to developing innovative solutions through world-class refrigeration compressor fluids for over 20 years. Our REFLO line of compressor fluids, recognized globally, delivers reliable performance in a name you can trust.

## When it comes to delivering the ultimate in lubrication, Petro-Canada is a global leader.

For more than 25 years, Petro-Canada has researched, developed and produced over 350 products that are marketed to more than 75 countries. With one of the most sophisticated manufacturing facilities of its kind in North America, we have the infrastructure that ensures our customers can count on a nimble, efficient supply source.

At Petro-Canada, we believe you have to go beyond accepted limitations to deliver the leading-edge products that customers demand. This translates to lubricants that exceed customer expectations for performance and quality. That is why we have greases that are effective under extreme operating conditions, hydraulic oils that keep equipment running smoothly and agricultural spray oils that fight pests. We even have a heat transfer fluid that is acceptable for use in a pipeline in the delicate Amazon rainforest.

## Petro-Canada's Pure Advantage.

Petro-Canada's white oils are 99.9% pure. Lubricants formulated with our base oils deliver excellent performance and productivity. Despite these successes, we never



stop asking questions. We continuously conduct research and development work with industrial and automotive OEMs around the world to develop new lubricants, fluids and greases to help them meet and exceed their goals. At Petro-Canada, we're going beyond today's standards.

## Confederation Freezers: Giving fluid costs the cold shoulder.

Keeping an ammonia-refrigerated cold storage facility running cost efficiently is a challenge. When Confederation Freezers of Brampton, Ontario, switched to REFLO 68A, the results were amazing – drain intervals were extended by 90% and oil consumption was also reduced by 90%.



# AT PETRO-CANADA WE PRIDE OURSELVES IN OFFERING A COMPLETE SOLUTION.



**REFLO A**

**REFLO Synthetic**

**REFLO XL Synthetic Blend**

**REFLO CFC**

## Delivering TANGIBLE SAVINGS SOLUTIONS.

At Petro-Canada, we appreciate that controlling and reducing costs is essential to your business.

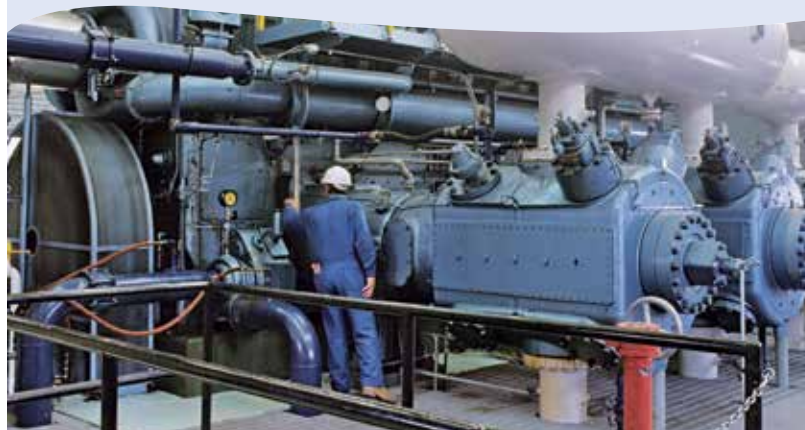
Our complete line of REFLO compressor fluids, with proper maintenance, helps to reduce fluid consumption, minimize downtime, protect equipment and save you money. REFLO has helped companies worldwide significantly reduce their lubrication costs: up to 80% in some cases. With proper change-out procedures, using REFLO may result in reduced oil carry-over and lower fluid consumption. And, we'd like to show you how much that could mean to your operation. Our comprehensive Cost Savings model compares your current fluid choice with the REFLO product that is right for you.

Please be advised that REFLO products are not recommended for top-up on pre-existing refrigeration compressor fluids with different chemistries. For example, REFLO A, XL (paraffinics) and Synthetic (PAO) fluids should not be mixed with naphthenic or aromatic type fluids. REFLO CFC is a

naphthenic fluid and should not be mixed with paraffinic fluids. Doing so results in increased risk of seal damage/leaks and reduced performance.

*"REFLO 68A lasts much longer than the conventional naphthenic oils we used before."*

*Jorgen Gabel  
Engineer - Tican, Fjerritslev, Denmark*





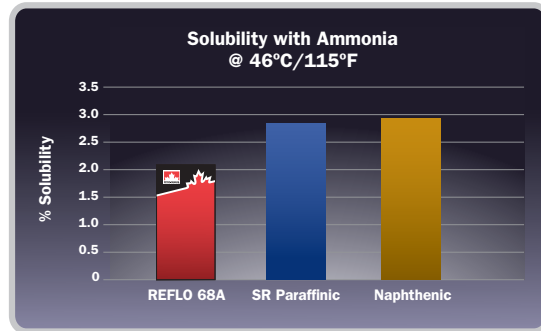
# REFLO A DELIVERS LOW MAINTENANCE COSTS AND LONG-TERM PEACE OF MIND.



**Formulated to provide reliable, long-term performance which may lead to potential operational cost savings.**

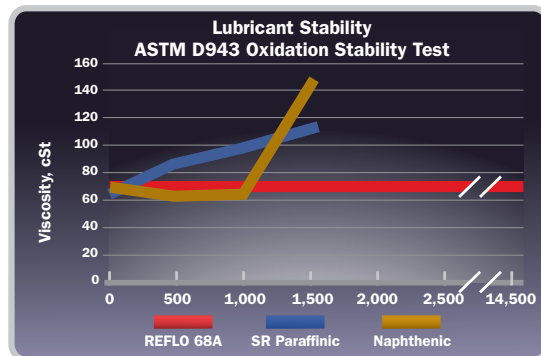
- Lower oil volatility can reduce fluid consumption and maintenance costs.
- Lower solubility in ammonia helps improve refrigeration efficiency.
- Excellent thermal and oxidative stability extends fluid life, reducing maintenance costs and downtime.
- REFLO A is approved by or meets the requirements of most major compressor OEMs.
- REFLO A is NSF H2 approved and is acceptable for use in food processing facilities in Canada where there is no possibility of food contact.
- REFLO A is recommended by Mayekawa/Mycom for screw compressors.

## Solubility with Ammonia



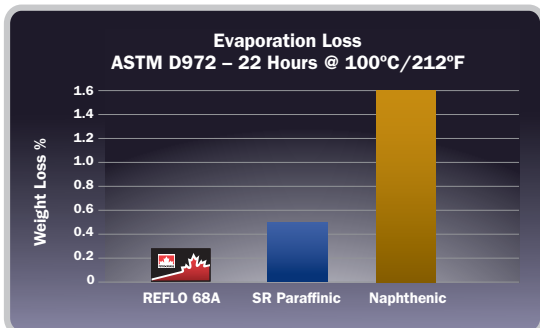
Less solubility in ammonia can improve system performance and efficiency, ensuring better protection against wear and lower maintenance costs.

## Lubricant Stability



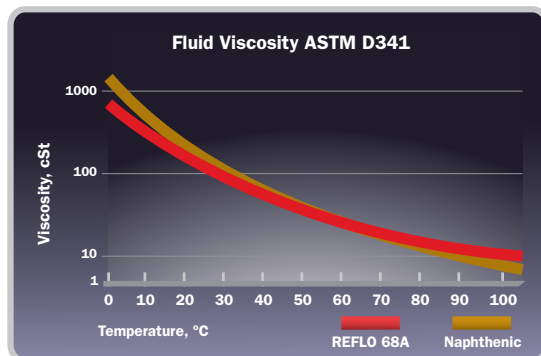
Excellent oxidation stability guards against fluid breakdown in systems where trace air or oxygen contamination is an issue, resulting in fewer change-outs and reduced downtime.

## Evaporation Loss



Lower oil volatility can reduce oil carry-over experienced with solvent refined paraffinic and naphthenic fluids.

## Fluid Viscosity



Significantly higher viscosity index than naphthenic compressor fluids means REFLO A does not thin out as much at higher temperatures, delivering better wear protection.

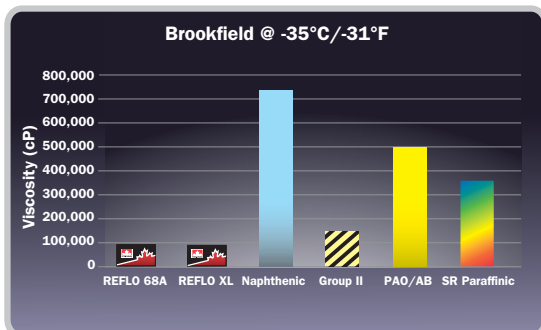
# REFLO XL SYNTHETIC BLEND KEEPS YOU IN BUSINESS LONGER WITH EXTENDED FLUID LIFE.



## REFLO XL Synthetic Blend delivers reliable, long-term performance in ammonia refrigeration systems.

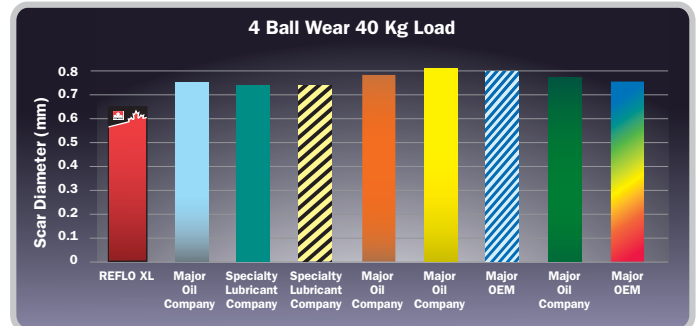
- Excellent thermal and oxidative stability extends fluid life to help reduce maintenance costs and downtime.
- Reduced fluid breakdown leads to longer fluid life for fewer change-outs, less top up and reduced costly downtime.
- Delivers very good low temperature fluidity and maintains pumpability in temperatures as low as -42°C (-44°F).
- Specially formulated with seal swell agent for reduced seal shrinkage.
- Lower oil volatility can reduce fluid consumption and maintenance costs.
- REFLO XL is approved or meets the requirements of most major compressor OEMs.
- REFLO XL is NSF H2 approved and is acceptable for use in food processing facilities in Canada where there is no possibility of food contact.
- REFLO XL is recommended by Mayekawa/Mycom for screw compressors.

### Brookfield @ -35°C/-31°F



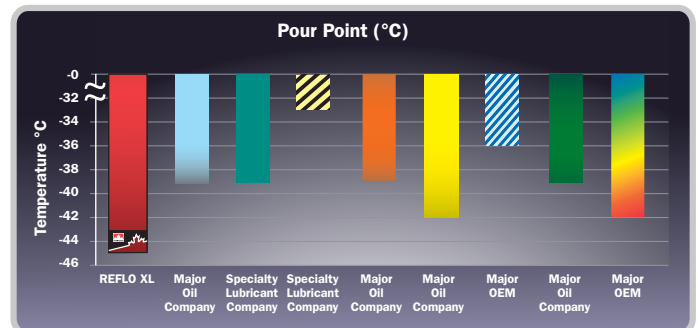
Delivering better fluid pumpability than most leading competitive compressor fluids, REFLO XL has very strong low temperature fluidity and maintains pumpability even in temperatures as low as -35°C/-31°F.

### 4 Ball Wear 40 Kg Load



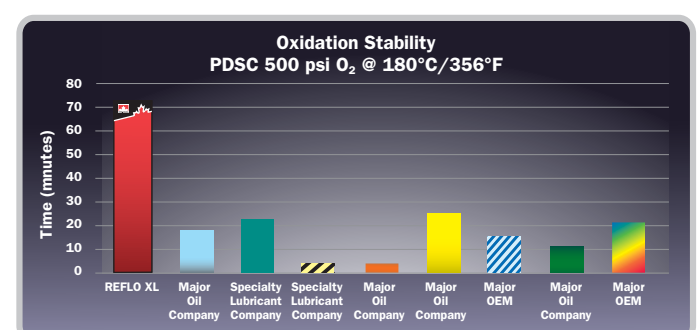
REFLO XL helps reduce premature liner and ring failures in reciprocating compressors. Its anti-wear capabilities reduce metal-to-metal contact, which helps prevent equipment failure.

### Pour Point



REFLO XL maintains a lower pour point compared to other leading Group II competitive products. That means continued performance even in lower temperatures within the compressor system.

### Oxidation Stability



Excellent oxidation stability delivers improved fluid breakdown in systems where trace air or oxygen contamination is an issue. That means fewer fluid change-outs and reduced costly downtime.

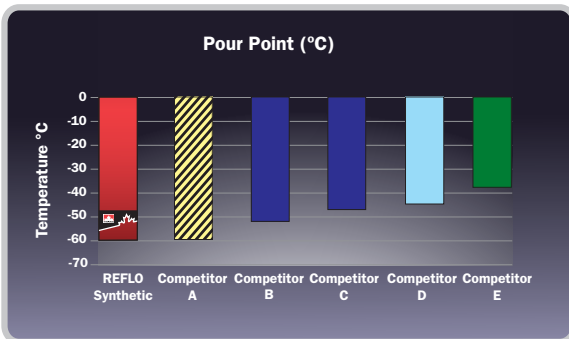
# REFLO SYNTHETIC PROVIDES EXCEPTIONAL PERFORMANCE AT EXTREME LOW TEMPERATURES.

## Full synthetic PAO formula provides exceptional performance and potential cost savings.

- Reliable performance at extreme low temperatures such as in blast freezers with very low evaporator temperatures.
- Full synthetic polyalphaolefin compressor fluid for ammonia refrigeration systems specially formulated with seal swell agent to reduce seal shrinkage.
- Excellent thermal and oxidation stability extends fluid life and helps reduce downtime.
- Improved stability maintains system cleanliness.
- Lower volatility reduces oil consumption and change-outs.
- REFLO Synthetic is approved or meets the requirements of most major compressor OEMs.

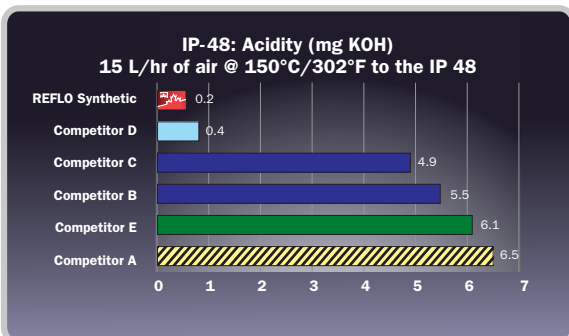


### Pour Point



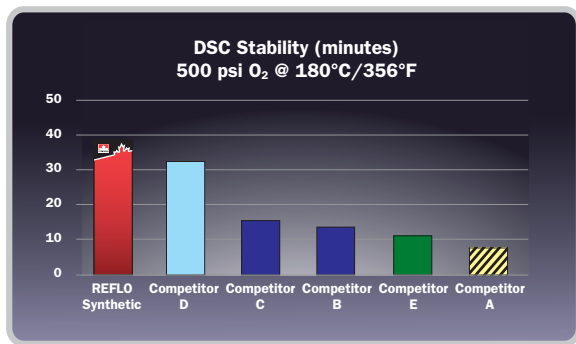
REFLO Synthetic provides excellent temperature performance.

### Oxidation



REFLO Synthetic's excellent oxidation properties help reduce sludging and extend service life.

### DSC Stability



Excellent oxidation stability period when compared to leading competitors.

# REFLO CFC PROVIDES ONGOING PERFORMANCE FOR TIME HONOURED COMPRESSOR SYSTEMS.



## REFLO CFC

- Formulated for use in systems using CFC (chlorinated fluorocarbon) refrigerants such as Freon, Genetron and Isotron.
- Highly refined naphthenic oil with good low temperature properties.

## What Our Customers Are Saying

“REFLO 68A separates from the ammonia gas and does not circulate through the system. With other fluids, I had to change filters every 3 to 6 months. I’m not even going to replace the filters on my equipment now. It’s saving my company a lot of money.”

*Johan Muller*  
Technical Manager - Hexkoel Beperk, Hex River Valley, South Africa

“With REFLO A, we’ve saved about 80 litres of oil a year in a large, two-stage compressor.”

*Michael Glering*  
Operations Manager - Claus Sorensen A/S, Vejle, Denmark



# Our No-Nonsense Lubricants Warranty

“Petro-Canada will repair damaged equipment, or replace damaged equipment parts resulting from a failure due to defects of the Petro-Canada lubricant, as long as the lubricant is used in accordance with your equipment manufacturer’s and our recommendations.”

**It’s more than just a warranty. It’s a commitment.**



## Our business is keeping your business going.

To place an order, please call a Customer Order Management Representative at:

**Canada** (English)..... Phone 1-800-268-5850  
(French) ..... Phone 1-800-576-1686  
**United States** ..... Phone 1-877-730-2369  
**Latin America** ..... Phone +1-416-730-2369  
**Europe** ..... Phone +1-416-730-2389  
**Asia** ..... Phone +1-416-730-2372  
**China** ..... Phone +86 (21) 6362-0066



**You can also e-mail us at** [lubecsr@suncor.com](mailto:lubecsr@suncor.com)

To learn more about how Petro-Canada lubricants, specialty fluids, oils and greases can help maximize your equipment performance, savings and productivity, please contact us at:

**North America** ..... Phone 1-866-335-3369  
**Europe** ..... Phone +44 (0) 121-781-7264  
**Germany** ..... Phone +49 (0) 201-726-2913  
**Latin America** ..... Phone +1-416-730-2369  
**Asia** ..... Phone +1-416-730-2372  
**China** ..... Phone +86 (21) 6362-0066  
**E-mail**..... [sales@suncor.com](mailto:sales@suncor.com)

**Visit us on the web at** [lubricants.petro-canada.ca](http://lubricants.petro-canada.ca)

