



PURITY* FG TROLLEY FLUID

Introduction

Petro-Canada's PURITY* FG Trolley Fluid is a food grade fluid used to lubricate hook and trolley systems in meat processing operations. PURITY FG Trolley Fluid is formulated to deliver tougher protection and longer service life than leading competitive fluids.

PURITY FG Trolley Fluid's superiority results from more than 25 years formulating experience. Using a patented HT purity process, Petro-Canada produces 99.9% pure base oils – the purest in the world. Free of impurities that can hinder fluid performance, these crystal clear base oils are fortified with a tenacious tackifier and specially selected anti-oxidant, anti-wear, anti-corrosion and lubricity additives.

The result is a food grade trolley fluid that better protects against wear, rust and drips than leading competitive fluids in the toughest meat processing conditions.

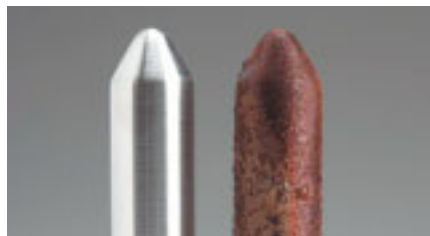
Unmatched Triple Protection

- **Better Wear Protection - extends trolley life, reducing downtime and maintenance costs**
 - maintains full lubrication, even under heavy carcass loads
 - special lubricity additive reduces bearing friction to prevent "sliders" – sluggish or sticking trolleys
 - anti-wear additives provide tough protection from pin and bushing wear



PURITY FG delivers tougher wear protection than the leading chemical company and major oil companies' fluids. Less wear means fewer production upsets, higher productivity and lower maintenance costs.

- **Better Corrosion Resistance - protects chains and trolleys from rust, even in the wettest operating conditions**
 - strong anti-corrosion additives prevent corrosive wear, extending the life of chains and trolleys, reducing maintenance costs
 - protects meat products from contact with rust particles and other metal oxides, reducing production wastage



PURITY* FG Specialty Chemical Company

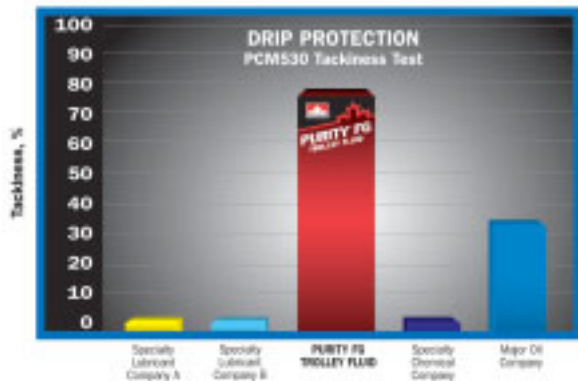
Unlike the leading chemical company's fluid, PURITY FG Trolley Fluid passes the demanding ASTM rust test (Sequence A & B). This strong level of corrosion protection can extend equipment life in the wettest operating conditions while protecting food products from rust contact.

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.



- **Better Drip Protection - protects meat products from fluid contact**
 - formulated with a special tackifier that strongly adheres to metal surfaces
 - tenacious resistance to fluid drips and throw-off from chains
 - protects meat products from fluid contamination, reducing production wastage



The tackiest of all leading competitors tested, **PURITY FG Trolley Fluid's** tenacious adherence to metal surfaces better protects food from fluid drips and throw-off from chains.

More Product Advantages

- **Trolleys clean up quickly and effectively**
 - reacts quickly with caustic washing solutions to form a detergent that aids in the removal of residual fats, oils and other residues
 - balanced fluid acidity protects against rapid depletion of caustic chemical cleaning solutions
- **Highly stable when heated and exposed to water - extends fluid life in heated storage tanks**
 - exceptional thermally stability, oxidation stability, and hydrolytic stability
 - allows fluid heating, without compromise to fluid life or performance
 - rapidly separates from water and does not form emulsions or sludge in oil-water bath systems
 - reduces fluid consumption and system cleaning expenses
- **Remains fluid at low temperatures**
 - ensures proper lubrication and smooth, uninterrupted trolley operation in chilled storage and low temperature production areas
- **Highly resistant to foaming and air entrapment**
 - protects pumps from fluid starvation and cavitation in centralized lubrication systems
 - storage tanks can be filled quickly and easily without interruption
- **Tasteless, odourless and non-staining**
 - wipes up quickly and effectively in the event of incidental contact with meat products
- **Fully approved for use in and around food processing operations**
 - H1 registered by NSF
 - meets the requirements of the U.S. Department of Agriculture (USDA) as an H1 lubricant for use in federally inspected meat and poultry plants where incidental food contact may occur
 - all fluid components comply with FDA 21 CFR 178.3570 "Lubricants with incidental food contact"
 - approved by the Canadian Food Inspection Agency for use in registered food processing plants
 - certified Kosher and Pareve by Star K
 - fits perfectly in HACCP (Hazard Analysis and Critical Control Point) and GMP (Good Manufacturing Practice) plans



Applications

PURITY FG Trolley Fluid is recommended for lubricating hook and trolley systems in meat processing operations. It can also be used as a low viscosity lubricating fluid for chains and conveyors, and as a rust protective oil.

PURITY FG Trolley Fluid may be applied by submersing trolleys in a heated fluid tank at temperatures up to 85°C (185°F), by brush or drip feed, or by a centralized lubrication system.

For the lubrication of chain and conveyor systems requiring a higher viscosity fluid, PURITY FG Chain Fluid Light or Chain Fluid Heavy is recommended.

Typical Performance Data

PROPERTY	ASTM TEST METHOD	RESULTS
ISO Viscosity Grade	-	46
SAE Viscosity Grade	-	20
Viscosity, cSt @ 40°C (SUS @ 100°F) cSt @100°C (SUS @ 210°F)	ASTM D445	43.7 (221) 7.31 (50.6)
Viscosity Index	ASTM D2270	131
Pour point, °C (°F)	ASTM D97	-15 (5)
Flash point, C O C, °C (°F)	ASTM D92	215 (419)
Colour	ASTM D1500	<0.5
Total acid number, mg KOH/g	ASTM D664	11
Water Separability at 54°C (129°F), mL fluid-water-emulsion (minutes to separation)	ASTM D1401	40-40-0 (10)
Wear Protection, four-ball wear, scar diameter, mm	ASTM D4172	0.45
Extreme Pressure Protection, four-ball weld load, kg (lb)	ASTM D2783	126 (278)
Rust Protection, A – distilled water B – synthetic sea water	ASTM D665	Pass Pass
Foaming Resistance, Sequence I Sequence II Sequence III	ASTM D892	10 / 0 60 / 0 20 / 0

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

Health and Safety

Petro-Canada PURITY* FG Trolley Fluid has no adverse affect on health, provided it is used as directed. To obtain a Material Safety Data Sheet (MSDS), contact one of our Techdata Info Lines.

TechData Info Lines

If you would like to know more about Petro-Canada PURITY* FG Trolley Fluid or any other product in our complete line of quality lubricants, please contact us at:

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