



## PURITY™ FG AW HYDRAULIC FLUIDS WITH MICROL™†

### Introduction

PURITY™ FG AW Hydraulic Fluids with MICROL™† are advanced food grade lubricants formulated to deliver high performance and long lasting service.

PURITY FG's enhanced performance results from more than 30 years of formulating experience. Using the HT purity process, Petro-Canada produces a 99.9% pure, crystal clear base oils – among the purest in the world. Virtually free of impurities that can hinder performance and fortified with specially selected performance additives, PURITY FG AW Hydraulic Fluids with MICROL have excellent resistance to oxidative breakdown.

PURITY FG AW Hydraulic Fluids with MICROL contain an antimicrobial preservative to protect the lubricant from deterioration, fouling and odour caused by microorganisms. This helps to ensure the lubricant continues to operate as designed despite harsh operating conditions. MICROL is the first EPA registered antimicrobial preservative for lubricants with incidental food contact (EPA Reg. No. 82076-1).

PURITY FG AW Hydraulic Fluids with MICROL have the required industry credentials and fit perfectly in HACCP (Hazard Analysis and Critical Control Point) and GMP (Good Manufacturing Practice) plans.

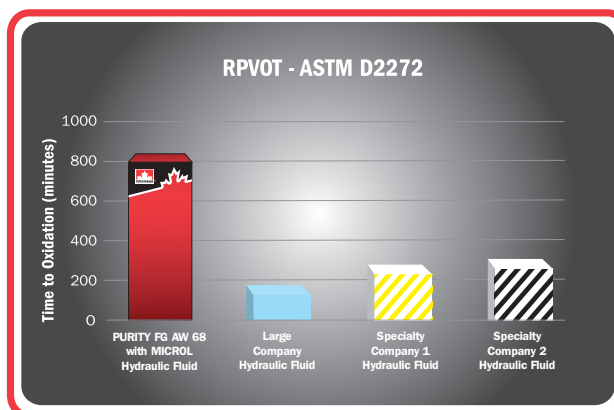
### Features and Benefits

- **Resists oxidative breakdown**
  - Outstanding resistance to oxidative breakdown even in the presence of water
  - Minimizes sludge formation to facilitate smooth and reliable operation of hydraulic valves and actuators

- **Excellent anti-wear properties**
  - Protects metal pump parts from scuffing and scoring
  - Improves operating reliability over a wide range of pressures
- **Strong resistance to rust and corrosion**
  - Protects against pump, actuator and equipment damage in moist or wet operations
- **Excellent resistance to contamination**
  - Rapidly separates from water
- **Highly resistant to foaming**
  - Helps reduce the risk of reservoir overflow
  - Minimizes potential for damage caused by pump cavitation

#### What is the HT difference?

Petro-Canada starts with the 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.



† MICROL is an antimicrobial product protection agent

- **Contains MICROL preservative to protect against lubricant degradation**

- MICROL antimicrobial protection is included in Petro-Canada's PURITY FG AW Hydraulic Fluids to provide antimicrobial product protection
- MICROL antimicrobial protection is not a substitute for normal plant cleanliness practices. MICROL antimicrobial protection helps to protect PURITY FG AW Hydraulic Fluids from microbes that can cause odour and product degradation



- PURITY FG AW Hydraulic Fluids with MICROL are acceptable for use in food processing facilities in Canada
- PURITY FG AW Hydraulic Fluids with MICROL are permitted to be used in equipment for the preparation of Kosher food
- Certified Halal by IFANCA



Nonfood Compounds  
Program Listed H1

## **Food Industry Credentials and Environmental Registrations**

- **PURITY FG AW Hydraulic Fluids with MICROL are fully registered for use in and around food processing areas, as indicated below:**
  - PURITY FG AW Hydraulic Fluids with MICROL are NSF H1 registered
  - MICROL antimicrobial preservative is registered with the U.S. EPA (No. 82076-1) for protection of the lubricant from microbial degradation
  - All fluid components comply with FDA 21 CFR 178.3570 "Lubricants with incidental food contact"

## **Applications**

PURITY FG AW Hydraulic Fluids with MICROL should be used only in moderate temperature up to (< 70°C / 158°F) applications.

## Typical Performance Data

PROPERTY	TEST METHOD	PURITY FG AW HYDRAULIC FLUIDS WITH MICROL			
		AW 32	AW 46	AW 68	AW 100
ISO Grade	-	32	46	68	100
Viscosity, cSt @ 40°C (SUS @ 100°F) cSt @ 100°C (SUS @ 210°F)	D445	31 (157) 5.3 (44)	46 (236) 6.8 (49)	65 (334) 8.6 (55)	98 (511) 11.3 (65)
Viscosity Index	D2270	102	104	104	101
Flash Point, COC, °C (°F)	D92	215 (419)	241 (466)	253 (487)	275 (527)
Pour Point, °C (°F)	D5950	-18 (0)	-18 (0)	-18 (0)	-15 (5)
Colour	D1500	0.5	0.5	<0.5	<0.5
Water Separability, 82°C (180°F), mL (min.)	D1401	42-38-0 (5)	41-39-0 (5)	41-39-0 (15)	41-39-0 (10)
Rust Protection, Sequence A Sequence B	D665 D665	Pass Pass	Pass Pass	Pass Pass	Pass Pass
Foaming Resistance, Sequence I	D892	5 / 0	5 / 0	0 / 0	0 / 0
RPVOT	D2272	825	836	866	910
Wear Protection: Four Ball Wear, scar diam., mm (40kg, 1200 rpm, 1hr, 75°C)	D4172	0.43	0.45	0.49	0.50

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

## Health and Safety

To obtain Material Safety Data Sheet (MSDS), contact one of Petro-Canada's TechData Info Lines.

## TechData Info Lines

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  
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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 :

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**Europe** . . . . . Phone +44 (0) 121-781-7264  
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