



PURITY™ FG AW HYDRAULIC FLUIDS

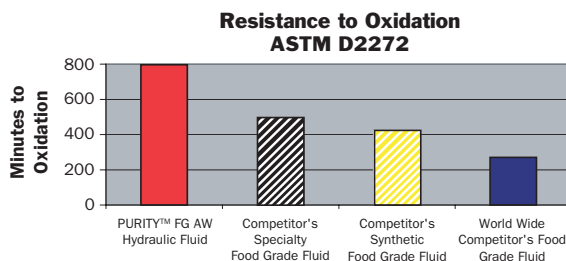
Introduction

Petro-Canada's PURITY™ FG AW Hydraulic Fluids are advanced food grade lubricants formulated to deliver long lasting protection.

PURITY FG's performance results from more than 30 years formulating experience. Using the HT purity process, Petro-Canada produces a 99.9%, crystal clear base oil – 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 have excellent resistance to oxidative breakdown. Tough enough to handle wet food processing environments with acidic contaminants and wide temperature swings, PURITY FG AW Hydraulic Fluids can help extend equipment life and reduce operational downtime.

Features and Benefits

- **Resists oxidative breakdown**
 - Outstanding resistance to oxidative breakdown even at high temperatures and in the presence of water and acidic contamination
 - Helps keep systems free of sludge and varnish to ensure smooth and reliable operation of hydraulic valves and actuators
 - Excellent resistance to oxidative breakdown can result in longer fluid life and help reduce downtime in tough operating environments



- **Excellent anti-wear protection**
 - Protects metal pump parts from scuffing and scoring
 - Protects equipment operating at high production rates for extended periods in tough conditions
 - Helps to extend equipment life

- Improves operating reliability over a wide range of pump output pressures
- PURITY FG AW46 passes Vickers 35VQ25A test

- **Long-term protection from rust and corrosion**
 - Prevents pump, actuator and circulating system damage in moist or wet operations
- **Excellent resistance to contamination**
 - Rapidly separates from water without loss of performance additives
 - Maintains consistency and fluid performance in the presence of food acids, juices and by-products
- **Highly resistant to foaming and air entrapment**
 - Prevents reservoir overflow
 - Eliminates "sponginess" from hydraulic systems and 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.



Food Grade Approvals

- **Fully approved for use in and around food processing areas**
 - H1 registered by NSF
 - All fluid components comply with FDA 21 CFR 178.3570 "Lubricants with incidental food contact"
 - Acceptable for use in food processing facilities in Canada.
 - Certified by Star K for use in equipment for the preparation of Kosher food
 - Certified Halal by IFANCA
 - Fits perfectly in HACCP (Hazard Analysis and Critical Control Point) and GMP (Good Manufacturing Practice) plans



**Nonfood Compounds
Program Listed H1**

Applications

PURITY FG AW Hydraulic Fluids provide excellent performance in high pressure systems including applications operating at more than 1000 psi (7000 kPa). They may also be used to lubricate anti-friction bearings and general circulating systems.

PURITY FG AW Hydraulic Fluids can also be used in inline oilers in pneumatic systems commonly found in food packaging applications. PURITY FG AW Hydraulic Fluids are ideal because they deliver clean, non-varnishing performance even in extended service, and are essentially odourless in the exhaust air.

Typical Performance Data

PROPERTY	TEST METHOD	PURITY™ FG AW HYDRAULIC FLUIDS			
		AW32	AW46	AW68	AW100
ISO Grade	–	32	46	68	100
Viscosity, cSt @ 40°C / (SUS @ 100°F) cSt @ 100°C / (SUS @ 210°F)	D445	29.8 / 154 5.2 / 44	45.4 / 234 6.8 / 49	63.3 / 328 8.4 / 55	101.5 / 529 11.5 / 66
Viscosity Index	D2270	101	102	102	99
Flash Point, COC, °C (°F)	D92	225/437	245/473	253/487	267/513
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, 54°C (129°F), mL (min.) 82°C (180°F), mL (min.)	D1401	40-40-0 (15) –	40-40-0 (15) –	40-40-0 (15) –	– 40-40-0 (15)
Rust Protection, A - Distilled Water B - Synthetic Sea Water	D665 D665	Pass Pass	Pass Pass	Pass Pass	Pass Pass
Foaming Resistance, Sequence I	D892	0 / 0	0 / 0	0 / 0	0 / 0
Wear Protection: Four Ball Wear, scar diam., mm 35VQ25A Vickers Test	D4172	0.46 –	0.48 Pass	0.49 –	0.44 –
Scuffing Load Capacity: FZG, Failure Load Stage	D5182 A/8.3/90	>12	>12	>12	>12
Oxidation Resistance: RPVOT, in minutes TOST, in hours	ASTM D2272 ASTM D943	844 >10,000	885 >10,000	886 >10,000	888 >10,000

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

Health and Safety

Petro-Canada PURITY FG AW Hydraulic 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.



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
Asia Phone +1-416-730-2372
China Phone +86 (21) 6362-0066

You can also e-mail us at 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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