

Petro-Canada TechData



PURITY™ FG EP GEAR FLUIDS

Introduction

Petro-Canada's PURITY™ FG EP Gear Fluids are formulated with SynFX™, an advanced additive technology designed to deliver synthetic-like performance and long lasting protection.



PURITY™ FG's outstanding performance results from more than 30 years formulating experience. Using the HT Purity Process, Petro-Canada produces a 99.9% pure, 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 EP Gear Fluids provide outstanding resistance to oxidation, and protection from wear and shock loading.

PURITY™ FG EP Gear Fluids have been designed to meet the highest food industry safety standards and can be easily integrated into HACCP (Hazard Analysis and Critical Control Point) plans and GMP (Good Manufacturing Practice) programs.

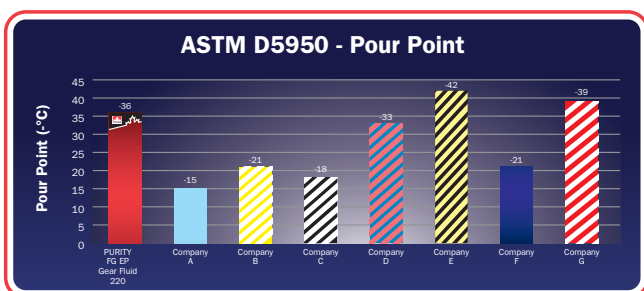
Features and Benefits

- **Outstanding resistance to oxidative breakdown**
 - Helps keep gear boxes free of sludge and varnish
 - Results in longer fluid life and reduced downtime even at high temperatures

- **Long-term protection from rust and corrosion**
 - Protects gears from moisture damage
 - Prevents the formation of emulsions that cause rust
 - Protects bronze and copper components
- **Excellent wear and extreme pressure protection**
 - Helps prevent seizure, scuffing and spalling under shock loading conditions
 - Protects from gear and bearing wear
 - Provides load bearing capability
- **Resistant to foaming and air entrapment**
 - Prevents reservoir overflow
 - Helps prevent gear damage caused by insufficient lubricant film due to aeration
- **Resistance to contamination**
 - Rapidly separates from water
- **Fully registered for use in and around food processing areas**
 - H1 registered by NSF
 - All fluid components comply with U.S. FDA 21 CFR 178.3570 Lubricants with incidental food contact
 - Certified Kosher Pareve by Star K
 - Certified Halal

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.




Nonfood Compounds
Program Listed H1
ISO 21469 Certified

Applications

PURITY™ FG EP Gear Fluids provide outstanding lubrication in enclosed gears (worm operating at moderate temperatures, helical, bevel and spur) operating under normal or heavy shock-loading conditions.

PURITY™ FG EP Gear Fluids can also be used in bearings and chain drives, providing long service life and clean operation.

Typical Performance Data

PROPERTY	TEST METHOD	PURITY™ FG EP GEAR FLUIDS 				
		100	150	220	320	460
ISO Grade	-	100	150	220	320	460
Viscosity, cSt @ 40°C SUS @ 100°F	D445	105 (547)	142 (744)	225 (1189)	302 (1603)	424 (2264)
cSt @100°C (SUS @ 210°F)	D445	12.0 (68)	14.6 (78)	19.7 (100)	23.8 (118)	29.8 (146)
Viscosity Index	D2270	103	101	100	99	99
Flash Point, COC, °C (°F)	D92	264 (507)	240 (464)	204 (399)	184 (363)	198 (388)
Pour Point, °C (°F)	D5950	-39 (-38)	-39 (-38)	-36 (-33)	-39 (-38)	-39 (-38)
Colour	D1500	<0.5	<0.5	<0.5	<0.5	0.5
Water Separability, 82°C (180°F), mL (min.)	D1401	43-37-0 (10)	43-37-0 (10)	43-37-0 (10)	43-37-0 (15)	43-37-0 (20)
Rust Protection, A – Distilled Water B – Synthetic Sea Water	D665 D665	Pass Pass	Pass Pass	Pass Pass	Pass Pass	Pass Pass
Foaming Resistance, Sequence I	D892	80/0	20/0	0/0	0/0	0/0
Anti-wear Protection: Four Ball Wear, mm (40 kg, 1200 rpm, 1 hr., 75°C)	D4172	0.42	0.42	0.44	0.43	0.42
Extreme Pressure Protection: Four Ball Weld, kg (lb)	D2783	126 (278)	160 (353)	160 (353)	160 (353)	160 (353)

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

Shelf Life: Product shelf life is 3 years from the date of manufacture when stored in sealed containers under protected storage conditions*

* Protected storage conditions includes indoor or covered storage, protected from contamination including exposure to rain and snow, exposure to direct sunlight, exposure to extreme temperatures and high / low temperatures cycles.

Health and Safety

To obtain Safety Data Sheets (SDS), contact one of our TechData Info Lines.



TechData Info Lines

If you are an **existing customer** looking 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/Europe/Asia Phone +1-866-957-4444

If you would like to become a Petro-Canada lubricants customer and require more information about specialty fluids, oils and greases that 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 0800-589-4751
China Phone +86 (21) 6362-0066

You can also e-mail us at lubecsr@suncor.com

Visit us on the web at lubricants.petro-canada.com