



## PURITY™ FG EP GEAR FLUIDS

### Introduction

Petro-Canada's PURITY™ FG EP Gear Fluids are advanced food grade lubricants formulated to deliver 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 also meet purity standards that are among the highest in the food processing industry and fit perfectly in HACCP (Hazard Analysis and Critical Control Point) and GMP (Good Manufacturing Practice) plans.

### 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 and in the presence of water and acidic contamination
- **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
  - Reduces gear and bearing wear
  - Improves 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 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 plants in Canada
  - Certified by Star K for use in equipment for the preparation of Kosher food.
  - Certified Halal by IFANCA



Nonfood Compounds  
Program Listed H1

### Applications

PURITY™ FG EP Gear Fluids provide outstanding lubrication in enclosed gears (worm, 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.

#### 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.



## Typical Performance Data

PROPERTY	TEST METHOD	PURITY™ FG EP GEAR FLUIDS				
		EP100	EP150	EP220	EP320	EP460
ISO Grade	-	100	150	220	320	460
AGMA Viscosity Grade	-	3	4	5	6	7
Viscosity, cSt @ 40°C (SUS @ 100°F) cSt @100°C (SUS @ 210°F)	D445	103 (538)	144 (754)	206 (1089)	327 (1750)	462 (2477)
	D445	11.6 (66)	14.9 (79)	17.6 (91)	23.2 (116)	30.3 (148)
Viscosity Index	D2270	100	95	92	89	98
Flash Point, COC, °C (°F)	D92	269 (516)	247 (477)	233 (451)	223 (433)	189 (372)
Pour Point, °C (°F)	D5950	-15 (5)	-18 (0)	-18 (0)	-21 (-6)	-27 (-17)
Colour	D1500	<0.5	<0.5	<0.5	<0.5	0.5
Water Separability, 82°C (180°F), mL (min.)	D1401	40-40-0 (10)	40-40-0 (15)	40-40-0 (15)	40-40-0 (25)	40-40-0(25)
Rust Protection, A – Distilled Water B – Synthetic Sea Water	D665	Pass	Pass	Pass	Pass	Pass
	D665	Pass	Pass	Pass	Pass	Pass
Foaming Resistance, Sequence I	D892	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
Anti-wear Protection: Four Ball Wear, mm (40 kg, 1200 rpm, 1 hr., 75°C)	D4172	0.40	0.39	0.37	0.37	0.37
Extreme Pressure Protection: Four Ball Weld, kg (lb)	D2783	126 (278)	126 (278)	126 (278)	126 (278)	126 (278)

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

## Health and Safety

Petro-Canada PURITY™FG EP Gear Fluids have no adverse effect on health, provided they are 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

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  
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