

# TECH DATA PURITY™ FG PAG GEAR OILS

For H1 food grade applications and high temperature industrial gear applications

### INTRODUCTION

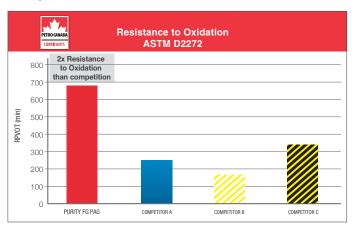
PURITY™ FG PAG Gear Oils are advanced gear lubricants formulated to deliver exceptional performance and resist degradation for service in both food grade and non-food grade industrial applications.

PURITY FG PAG Gear Oils are synthetic polyalkylene glycol (PAG) based lubricants formulated with specially selected additives to protect against wear, oxidation, rust and corrosion. PURITY FG PAG Gear Oils exhibit high viscosity indices for a wide range of applications and the inherent properties of polyalkylene glycol base fluids help improve lubricity. These synthetic fluids are tough enough to handle food processing applications, and severe, heavy duty industrial applications over wide temperatures, and are suitable for industrial applications and gearboxes.

#### **PERFORMANCE BENEFITS**

#### Resists oxidative breakdown

- Resists oxidative degradation that can lead to the formation of deposits
- May reduce operating costs by extending time between fluid change-outs
- Helps the industrial gear system to stay cleaner longer and help reduce maintenance costs



#### Low foaming tendency

- Ensures a continuous lubricant film present at all times
- Prevents overflow from gear-boxes and oil reservoirs

#### **High Viscosity Indexes**

 Ideal for use in wide range of operating temperatures with its naturally high viscosity indexes

#### **Improved Lubricity**

 The inherent properties of polyalkylene glycol base fluids in PURITY FG PAG Gear Oils can help improve lubricating and protecting gear tooth surfaces against rolling and sliding motion in worm gear applications

## FULLY REGISTERED FOR USE IN FOOD PROCESSING AREAS

- H1 registered by NSF
- All components comply with FDA 21 CFR 178.3570 Lubricants with incidental food contact
- Certified Kosher Pareve by Star-K
- Certified Halal by IFANCA
- Easily integrated into HACCP (Hazard Analysis and Critical Control Point) plans and GMP (Good Manufacturing Practice) programs







#### **APPLICATION**

 PURITY FG PAG Gear Oils may be used to lubricate various industrial gear drive equipment in high temperature applications intended for producing, manufacturing, preparing, treating or packaging food

NOTE: Always check your OEM manual for lubrication requirements during consolidation.

## COMPATIBILITY OF PURITY FG PAG GEAR OILS WITH OTHER LUBRICANTS

Polyalkylene glycol (PAG) based lubricants are not compatible with mineral oils, PAO based fluids and many other synthetic

lubricants. Before filling a gear reservoir with, or converting a system over to PURITY FG PAG Gear Oils, it is recommended for users to follow special flushing and conversion procedures. Depending on the specific type of PAG base fluid there may be compatibility issues with mixing different types of PAG lubricants. It is important to check compatibility between different PAG lubricants before topping up gear reservoirs. Also, PAG based lubricants are not compatible with certain materials used in components like seals, paints, interior coatings, and plastics. For further details, please refer to technical bulletin TB-1308 for Guidelines for Cleaning, Flushing and Converting to PURITY FG PAG Gear Oils, or consult your Petro-Canada Lubricants Technical Services Advisor.

#### **TYPICAL PERFORMANCE DATA**

Property	Test Method	PURITY FG PAG GEAR OIL 150	PURITY FG PAG GEAR OIL 220	PURITY FG PAG GEAR OIL 460
Density, kg/L @ 15°C	D4052	1.053	1.076	1.076
Viscosity, cSt @ 40°C cSt @ 100°C	D445	151 28.3	220 38.4	459 77.3
Viscosity Index	D2270	227	226	251
Flash Point, COC, °C (°F)	D92	268 (514)	263 (505)	265 (509)
Pour Point, °C (°F)	D5950	-40 (-40)	-38 (-36)	-35 (-31)
Oxidation Stability, Time to oxidation, min	D2272	673	678	670
4-Ball Wear, mm scar diameter (40kg, 1200 rpm, 1 h, 75°C)	D4172	0.45	0.45	0.38
4-Ball Weld, Kg	D2783	126	160	160
Brookfield Viscosity, cP @ -11°C @ -15°C @ -20°C @ -25°C @ -30°C	D5133	5,000 7,542 13,405 26,985 74,965	8,122 12,820 23,989 65,283 > 100,000	17,094 26,647 49,474 > 100,000 > 100,000

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

Learn more about us: **lubricants.petro-canada.com** 

Contact us: lubecsr@hfsinclair.com

Committed to the disciplined operation of our business



Petro-Canada Lubricants Inc.

2310 Lakeshore Road W. Mississauga, Ontario, Canada L5J 1K2 **Iubricants.petro-canada.com**