

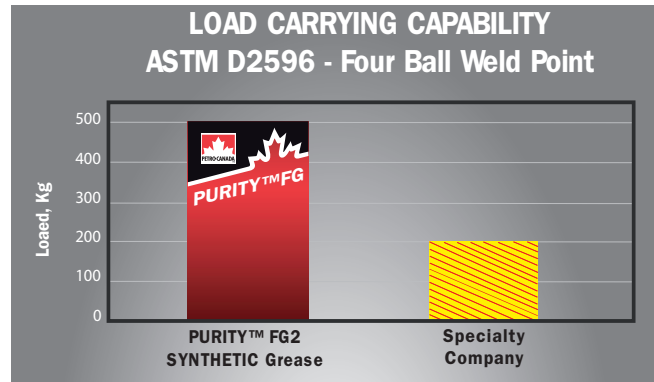


PURITY™ FG2 SYNTHETIC AND PURITY FG2 SYNTHETIC HEAVY 220 GREASES

Introduction

Petro-Canada's PURITY™ FG2 Synthetic and PURITY FG2 Synthetic Heavy 220 greases are advanced food grade greases specially formulated for the toughest food processing applications. Their advanced chemistry provides outstanding protection against wear and water washout, over a wide range of operating temperatures.

PURITY FG2 Synthetic and PURITY FG2 Synthetic Heavy 220 greases 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.

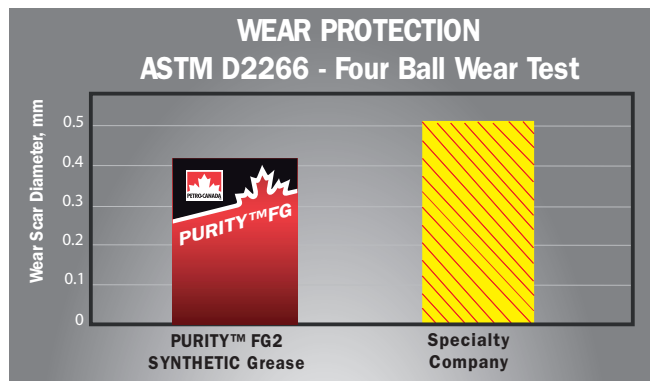


PURITY FG2 Synthetic grease provides higher load carrying capability than a specialty lubricant suppliers' synthetic food grade grease, so it's ideal for food processing applications running under heavier loads.

Superior Performance Benefits

- **Higher load carrying capability and excellent protection against wear**
 - Excellent extreme pressure (EP) and antiwear (AW) performance
 - Protects gears, bearings and equipment under higher loads
 - Helps to prevent seizure, scuffing and spalling

- **Strong resistance to lubricant breakdown and water washout in harsh operating environments**
 - Maintains consistency and lubrication in the presence of water, food acids, juices and by-products
 - Does not run from bearings under steam cleaning
 - Highly resistant to water washout and most sterilizing chemicals used in cleaning



PURITY FG2 Synthetic delivers equal wear protection to a specialty lubricant suppliers' synthetic food grade grease. Less wear means fewer production upsets, higher productivity and lower maintenance costs.

- **Effective across a wide range of temperature extremes**
 - Normal operating range from:
 - Purity FG2 Synthetic: -40°C/-40°F to 200°C/392°F.
 - Purity FG2 Synthetic Heavy 220: -35°C/-31°F to 200°C/392°F.
 - Purity FG2 Synthetic pumpable down to -35 °C/-31 °F. Purity FG2 Synthetic Heavy 220 pumpable down to -25 °C/.
 - Can be used intermittently as high as 250°C (482°F)
 - Ideal for heavily loaded bearings operating under wide temperature swings

More Performance Advantages

- **Excellent oxidation resistance extends grease life**
 - Performance life is typically increased by up to 2 times that of regular mineral oil based grease
- **Highly effective protection against rust and corrosion**
 - Prolongs component life and guards against unplanned downtime
- **Tasteless, odourless and non-staining**
 - *Tackified to stay in place Purity FG2 Synthetic Heavy 220 is formulated with tackifiers to keep it in place under the most demanding circumstances.

Food Grade Approved

- **Fully registered for use in and around food processing operations**
 - H1 registered by NSF
 - All components comply with FDA 21 CFR 178.3570 Lubricants with incidental food contact
 - Certified Kosher Pareve
 - Certified Halal



Nonfood Compounds
Program Listed H1



- For a complete list of PURITY FG credentials, consult a Petro-Canada Lubricants Representative
- **Zinc Free**

Applications

PURITY FG2 Synthetic and PURITY FG2 Synthetic Heavy 220 greases are recommended as multipurpose lubricants across all food processing applications such as freezers, high temperature applications including ovens, multi service bearings, canning, Bottling Equipment, and Mixers.

They are especially effective in food plant applications running under heavy loads, or subject to high and low temperature extremes. Purity FG2 Synthetic is particularly recommended for use in low temperature applications. Purity FG2 Synthetic 220 Heavy is most suitable for use under heavy loads, and where greases need to stay in place.

Typical Performance Data

PROPERTY	TEST METHOD	PURITY FG2 SYNTHETIC	PURITY FG2 SYNTHETIC HEAVY 220
NLGI Grade	-	2	
Grease Type	-	Calcium Sulfonate / Carbonate Complex	Calcium Sulfonate / Carbonate Complex
Penetration, Unworked	ASTM D217	296	296
Worked 60 strokes	ASTM D217	294	293
Worked, Change after 10,000 strokes	ASTM D217	+11	-5
Colour	-	Tan	Tan
Dropping Point, °C / °F	ASTM D2265	304 / 579	304 / 579
Water Washout, % loss @ 79°C / 174°F	ASTM D1264	0.0	0.0
Wear Protection: Timken, kg / lb	ASTM D2509	27 / 60	27 / 60
Four Ball Wear, scar diam (mm)	ASTM D2266	0.42	0.49
Four Ball Weld, kg	ASTM D2596	500	315
Load Wear Index	ASTM D2596	52.7	30.8
Corrosion Protection: Copper Corrosion	ASTM D4048	1B	1B
Bearing Corrosion	ASTM D1743	Pass	Pass
Oxidation Stability: Pressure drop after 100 hours, psi (kPa)	ASTM D942	1.0 (7.0)	1.0 (7.0)
Base Oil Viscosity: cSt @ 40°C / SUS @ 100°F	ASTM D445	50 / 233	220 / 1140
cSt @ 100°C / SUS @ 210°F	ASTM D445	7.8 / 52	24 / 119
Operating Temperature Range: normal operation		-40°C to 200°C / -40°F to 392°F	-35°C to 200°C / -31°F to 392°F
short transient periods		up to 250°C / 482°F	up to 250°C / 482°F

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

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

You can also email us at lubecsr@suncor.com



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

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