



PURITY™ FG2 WITH MICROL™† MAX GREASE

Introduction

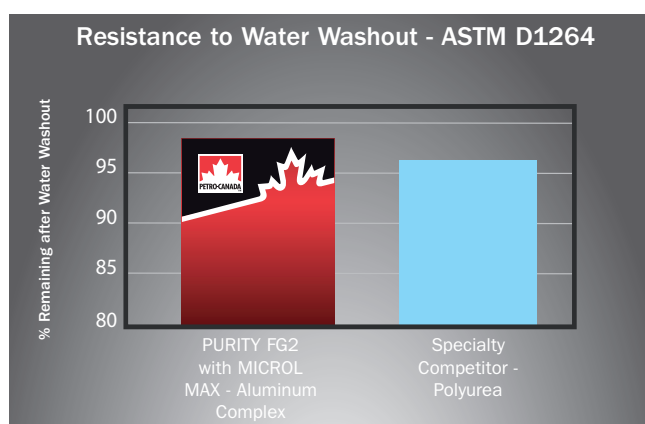
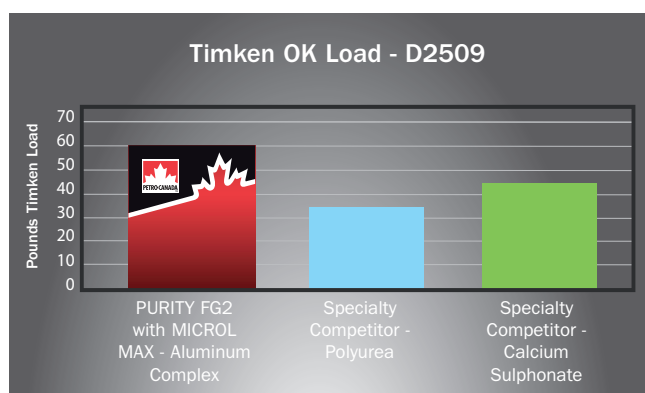
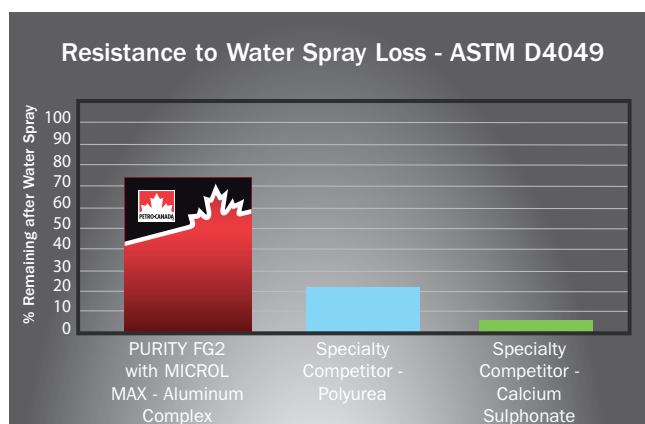
PURITY™ FG2 with MICROL MAX is an advanced food grade grease specially formulated to deliver excellent performance and food grade purity under the highly demanding conditions of food processing operations.

PURITY FG2 with MICROL MAX contains an antimicrobial preservative to protect the lubricant from deterioration, fouling and odour caused by microorganisms. This helps to ensure the lubricant continues to operate as designed despite harsh operating conditions.

PURITY FG2 with MICROL MAX has the required industry credentials and fits perfectly in HACCP (Hazard Analysis and Critical Control Point) and GMP (Good Manufacturing Practice) plans.

Superior Performance Benefits

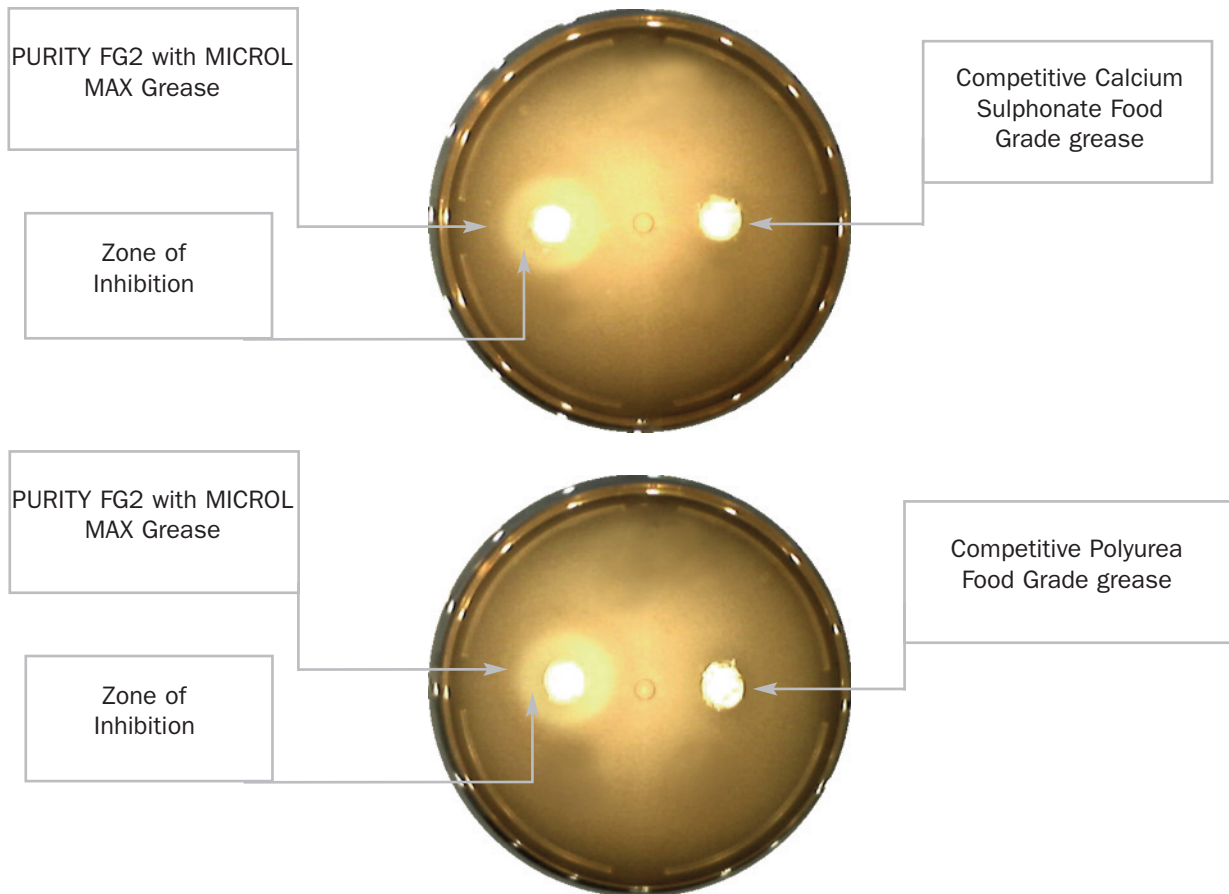
- **Excellent resistance to lubricant breakdown in harsh operating environments**
 - Maintains consistency and lubrication in the presence of food acids, juices and by-products
 - Does not run from bearings under steam cleaning
 - Highly resistant to water washout, water jet spray, and most sterilizing chemicals used in cleaning
- **Prevents bearing, gear and equipment damage in moist or wet operations**
 - Will not run from bearings near ovens
 - Pumpable at relatively low temperatures
 - Ideal for moderately loaded bearings operating under wide temperature swings
- **Better protection of gears, bearings and equipment under moderate shock loading**
 - Prevents seizure, scuffing and spalling under shock loading conditions
- **Long-term equipment protection from rust and corrosion**
- **White, non-staining performance**
 - Easy to spot excess grease squeezing out of failing seals
 - Does not stain clothing, wood or porous materials
 - Wipes up easily and effectively in the event of incidental contact with food products or packaging



† MICROL is an antimicrobial product protection agent

- **Contains an antimicrobial preservative to inhibit product degradation**
 - The antimicrobial agent provides continuous antimicrobial product protection to protect the lubricant against microbes that can cause product degradation
 - Antimicrobial product protection is not a substitute for normal plant cleanliness practices

Zone of Inhibition Test



Source: Petro-Canada Lubricants Inc.

This information is based upon standard laboratory tests and is provided for comparative purposes to substantiate antimicrobial activity for non-public health applications. MICROL product protection inhibits the growth of microorganisms that can cause odours and product degradation.

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- **The Zone of Inhibition is the area surrounding the grease plug where there is no growth of microbes**
 - The test was modeled after those performed in the pharmaceutical industry
 - The plugs on the right show 2 different competitive food grade machinery greases and the plugs on the left show PURITY FG2 with MICROL MAX
 - As demonstrated, both images show a halo surrounding the plug on the left, which is the Zone of Inhibition
 - The test indicated that the calcium sulphonate and polyurea greases were not able to produce a Zone of Inhibition

PURITY™ FG2



Food Industry Credentials and Environmental Registrations

- **Fully approved for use in and around food processing areas, as indicated below:**
 - Contains MICROL antimicrobial product protection
 - PURITY FG2 with MICROL MAX is H1 registered by NSF
 - This product is produced in strict compliance with ISO 21469
 - All fluid components comply with FDA 21 CFR 178.3570 "Lubricants with incidental food contact"
 - Acceptable for use in food processing facilities in Canada
 - Kosher and Pareve Certification
 - Halal Certification
- **Free of genetically modified substances (GMS)**
- **Maintains food allergy safety**
 - Free of gluten
 - Does not contain, nor is it manufactured in a facility that manufactures, stores, or otherwise handles any nuts, sesame seeds, milk, eggs, fish and shellfish, soy, wheat or sulphites. For a complete list of PURITY FG approvals, consult a Petro-Canada Lubricants Technical Service Representative
- **Zinc free**



Nonfood Compounds
Program Listed H1



Applications

PURITY FG2 with MICROL MAX Grease is specially formulated for the food industry, but performs equally well in these applications:

- Sleeve and anti-friction bearings, slides and guides
- Lumber and pulp/paper machinery where staining or contamination is a concern
- Textile machinery bearings

Typical Performance Data

PROPERTY	TEST METHOD	PURITY FG2 with MICROL MAX
NLGI Grade	-	2
Grease Thickener Type		Aluminum Complex
Penetration:	D217	
Unworked		262
Worked 60 strokes		292
Penetration change after 10,000 strokes		1
Colour	-	Cream
Odour	-	Slight odour
Dropping Point, °C / °F	D2265	287/549
Water Washout, % @ 79°C (174°F)	D1264	1.75
Water Spray off, % loss	D4049	25.5
Extreme Pressure Protection:		
Timken, kg / lb	D2509	27/60
Four Ball Wear, scar diam, mm	D2266	0.55
Four Ball Weld, kg	D2596	315
Load Wear Index	D2596	43.4
Corrosion Protection:		
Copper Corrosion	D4048	1a
Bearing Corrosion	D1743	Pass
Oxidation Stability:	D942	1.0
Pressure drop after 100 hours, kPa / PSI		
Base Oil Viscosity,		
cSt @ 40°C / SUS @ 100°F	D445	182/958
cSt @ 100°C / SUS @ 210°F	D445	17/88
Base Oil Pour Point, °C / °F	D5950	-15/5
Normal Operating Temperature Range		-20°C to 160°C -4°F to 320°F

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

Health and Safety

To obtain Material Safety Data Sheet (MSDS), 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 e-mail 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

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