



# TECHNICAL DATA

Rev.3/16

## PETRO-GARD® FG-100

### FOOD GRADE HIGH TEMPERATURE SYNTHETIC OVEN CHAIN LUBRICANT

**DESCRIPTION: ISO 100 Food Grade NSF H1 Registered #141246**  
**Proprietary Synthetic Ester Blend, High Flash Point, Excellent Wear Protection**

**PETRO-GARD® FG100** is acceptable as a lubricant with incidental food contact (H1) for use in and around food processing areas that meets all regulatory requirements under FDA 21 CFR 178.3570. Recommended Temperature Range: -40°C to 315°C (-40°F to 600°F).

**PETRO-GARD® FG-100** is a high performance lubricant formulated from premium state of the art synthetic esters and proprietary additives to withstand these extreme high temperature oven environments:

#### BAKERY OVEN CHAINS IN:

TORTILLA OVENS  
PITA OVENS  
TUNNEL/TRAY OVENS (PIN/ROLLER CHAINS)  
RACK OVENS  
SPIRAL OVENS  
CONTINUOUS CONVEYOR OVENS (ROLLER BALL BEARING CHAINS)  
BAGEL/MUFFIN OVENS  
ALL FOOD PROCESSING EQUIPMENT

#### FEATURES & BENEFITS:

- **NSF H-1 registered:** Can be used in food processing plants with incidental contact with food. Contains no known carcinogens, non hazardous and is considered environmentally friendly.
- **Exceptional Wear Protection:** Provides protection against wear, friction, rust and corrosion; thus, extending bearing, chain and equipment life.
- **Reduced Carbonization & Oxidation:** PETRO-GARD® FG-100 is a clean, ashless fluid-film that decreases energy consumption by maintaining optimal amperage, eliminating chain stretching and chain dragging.
- **Lower Evaporation & Volatility:** Very stable in high temperatures, provides longer lubrication intervals, saves money on lubricant consumption, has less smoke and no objectionable odors.
- **High Flash Point:** PETRO-GARD® FG-100 has a high flash point and can be applied to either a hot or cold chain while in production, hence reducing maintenance cost and increasing productivity.
- **Oven Fires Eliminated:** Lubricants such as solid graphite with low flashpoint carriers can cause fires in the oven if a flame from burner ignites before carrier evaporates

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The information contained herein is believed to be accurate but all suggestions are made without Guarantee because the conditions of actual use are beyond our control. Petrochem, Inc. disclaims all Liability incurred in connection with the use of this data or suggestions.

*Member of the American Baking Society*

**PHYSICAL PROPERTIES:**

Property	Test Method	Typical Specification
ISO GRADE	ASTM D445	100
Viscosity, cSt @ 40°C (104°F)	ASTM D445	100
Viscosity, cSt @ 100°C (212°F)	ASTM D445	12
Viscosity Index	ASTM D2270	120
Fire Point, °C (°F)	ASTM D92	350 (662°F)
Flash Point, °C (°F)	ASTM D92	315 (600°F)
Pour Point, °C (°F)	ASTM D97	-40
4-Ball Wear Test, 40 Kg, 600 RPM, @ 200°C (400°F), 1 hr. Average wear scar diameter, mm	ASTM D4172	0.44
4-Ball Wear Test, 40 Kg, 1200 RPM, @ 200°C (400°F), 1 hr. Average wear scar diameter, mm	ASTM D4172	0.48
Evaporation Loss, 6.5 HRS. @ 204°C (400°F), %	ASTM D2595	1.4
Ramsbottom Carbon Residue, %	ASTM D524	0.12
Density @ 25°C		0.97 @ 25 C
Pounds/ Gallon		8.1 @ 25 C
Odor		Mild
Appearance	QL4099	Light Amber Liquid

**REGULATORY STATUS:**

PETROCHEM P/N#	PETRO-GARD® FG-100
TSCA (USA)	√
EINECS (EU)	√
DSL (Canada)	√
AICS (Australia)	√
ECL (Korea)	√
METI/ENCS (Japan)	
IECS (China)	√
PICCS (Philippines)	√
NSF Category Code	H1
NSF Registration Number	
Incidental Food Contact	Yes



**STORAGE & HANDLING PRACTICES:**

Warehouse in unopened containers at ambient conditions. Under these conditions, storage life is practically indefinite. For information on the safe handling and use of this product, refer to the Material Safety Data Sheet. For more information and availability, call (630) 513-6350.