

# TECHNICAL DATA

## **PETRO-GARD® FG-68**

Rev.3/16

## FOOD GRADE HIGH TEMPERATURE SYNTHETIC OVEN CHAIN LUBRICANT

**DESCRIPTION: ISO 68 Food Grade** 

Proprietary Synthetic Ester Blend, High Flash Point, Excellent Wear Protection

PETRO-GARD® FG-68 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-68 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-68 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-68 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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## **PHYSICAL PROPERTIES:**

| Property   | Test Method | Typical Specification |
|--|-------------|-----------------------|
| ISO GRADE  | ASTM D 445  | 68                    |
| Viscosity, cSt @ 40°C (104°F)  | ASTM D 445  | 68                    |
| Viscosity, cSt @ 100°C (212°F)   | ASTM D 445  | 10                    |
| Viscosity Index  | ASTM D 2270 | 130                   |
| Fire Point, °C (°F)  | ASTM D 92   | 340 (645°F)           |
| Flash Point, °C (°F)   | ASTM D 92   | 315 (600°F)           |
| Pour Point, °C (°F)  | ASTM D 97   | -40                   |
| 4-Ball Wear Test, 40 Kg, 600 RPM, @ 200°C (400°F), 1 hr. Average wear scar diameter, mm  | ASTM D 4172 | 0.42                  |
| 4-Ball Wear Test, 40 Kg, 1200 RPM, @ 200°C (400°F), 1 hr. Average wear scar diameter, mm | ASTM D 4172 | 0.46                  |
| Evaporation Loss, 6.5 HRS. @ 204°C (400°F), %  | ASTM D-2595 | 1.8                   |
| Ramsbottom Carbon Residue, %   | ASTM D524   | 0.08                  |
| Density @ 25°C   |             |                       |
| Pounds/ Gallon   |             | (Est.) 8.1 @ 25 C     |
| Odor   |             | Mild                  |
| Appearance   | QL 4099     | Light Amber Liquid    |

## **REGULATORY STATUS:**

| PETROCHEM P/N#          | PETRO-GARD® FG-68 |  |
|-------------------------|-------------------|--|
| TSCA (USA)              | √                 |  |
| EINECS (EU)             | √                 |  |
| DSL (Canada)            | V                 |  |
| AICS (Australia)        | √                 |  |
| ECL (Korea)             | √                 |  |
| METI/ENCS (Japan)       |                   |  |
| IECS (China)            | V                 |  |
| 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.