

## PETRO-GARD® 220

### EXTREME HIGH TEMPERATURE SYNTHETIC OVEN CHAIN LUBRICANT

**DESCRIPTION: Synthetic, Fully Formulated With Esters, ISO 220 (SAE 50)  
High Flash Point, Excellent Wear Protection, NSF H2 Registered**

PETRO-GARD® 220 is formulated from premium state of the art synthetic polyol ester base oils and proprietary additives for conveyor roller ball bearing chains, pin/roller chains, tortilla chains, slides and gears that operate in extreme high temperature oven environments. PETRO-GARD® 220 has established several OEM approvals and credible testimonies from bakeries and other industries worldwide.

#### FEATURES & BENEFITS:

- NSF H-2 registered, meets USDA 1998 H-2 guidelines: Can be used in food plants for non-food contact. Contains no known carcinogens and is environmentally friendly.
- Exceptional Wear Protection: It has one of the highest lubricity ratings to protect against wear, friction, rust and corrosion; thus, extending bearing, chain and equipment life.
- Reduced Carbonization & Oxidation: PETRO-GARD® 220 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® 220 has a high flash point exceeding 615°F & can be applied to either a hot or cold chain while in production, hence reducing maintenance cost and increasing productivity.

#### PHYSICAL PROPERTIES:

Property	Test Method	Typical Specification
ISO GRADE	ASTM D445	220
Specific Gravity, 15.6°C	ASTM D1298	< 1.0
Viscosity, cSt @ 40°C (104°F)	ASTM D445	220
Viscosity, cSt @ 100°C (212°F)	ASTM D445	19
Viscosity Index	ASTM D2270	95
Fire Point, °C (°F)	ASTM D92	340°C (655°F)
Flash Point, °C (°F)	ASTM D92	310°C (590°F)
Pour Point, °C (°F)	ASTM D97	-20°C (-6°F)
Acid No., mg KOH/g	ASTM D3242	0.2

#### Petrochem, Inc.

6N999 Whispering Trail Road, St. Charles, IL 60175

Phone (630) 513-6350 Fax (630) 513-8324

Web [www.petrochem1.com](http://www.petrochem1.com)

Email [info@petrochem1.com](mailto:info@petrochem1.com)



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**

4-Ball Wear Test, 40 Kg, 1200 RPM, @ 100°C (212°F) 1 hr. Average wear scar diameter, mm	ASTM D4172	0.4
4-Ball Wear Test, 40 Kg, 600 RPM, @ 200°C (392°F) 1 hr. Average wear scar diameter, mm	ASTM D4172	0.5
Evaporation Loss, 6.5 HRS. @ 204°C (400°F), %	ASTM D972	0.9
Falex Tooth Wear (15 min., 700 lb. gage load,) Teeth Lost	ASTM D2670	0
Rust Test, 48 Hrs. Distilled Water	ASTM D665A	Pass
Rust Test, 48 Hrs. Sea Water	ASTM D665B	Pass
Typical RBOT @ 150°C, Oxidation Lifetime, min.	ASTM D2272	1,180
Appearance	QL4099	Light Amber Color

**APPLICATIONS:**

- Bakery Oven Chains
- Roller Ball Bearing Chains on Oven Conveyors
- Pin/Roller Chains on Tunnel & Tray Ovens
- Tenter Frame Oven Chains
- Paint Oven Chains
- Wood Laminating Oven Chains
- Fiberglass Production
- Cement Plants
- Kiln Car Wheel Bearings & Support Rollers
- Beverage Can Lines
- Lithographic Chains
- Drying Ovens

**REGULATORY STATUS:**

PETROCHEM P/N#	PETRO-GARD® 220
TSCA (USA)	✓
EINECS (EU)	✓
NDSL (Canada)	✓
AICS (Australia)	✓
ECL (Korea)	✓
PICCS (Philippines)	✓
Direct Food Contact No.	H2
NSF Registration Number	138124
Food Processing Plants	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.