



SAFE RELIABLE MACHINERY LUBRICANTS



Technical Data

Updated : 3/2024

PETRO-GARD® FG-220

FOOD GRADE HIGH TEMPERATURE SYNTHETIC OVEN CHAIN LUBRICANT

Approved by Numerous OEMS and Corporations

Exceptional Performance

With Petro-Gard FG-220, you're not just investing in a lubricant; you're investing in peace of mind, reliability, and the longevity of your equipment. Experience the difference that premium quality makes in your operations. Trust Petrochem's best performance lubricant, Petro-Gard FG-220 for unparalleled performance in high-temperature oven environments.

Certified for Food Safety

NSF H1 Registered (141245) and ISO 220, Petro-Gard FG-220 complies with USDA 1998 H-1 guidelines, ensuring its suitability for use in food processing plants with potential incidental contact with food. Meeting all regulatory requirements under FDA 21 CFR 178 3570, it's a lubricant you can trust in critical environments.



PITA OVENS

RACK OVENS

SPIRAL OVENS

TORTILLA OVENS

TUNNEL / TRAY OVENS

BAGEL / MUFFIN OVENS

CONTINUOUS CONVEYOR OVENS

ALL FOOD PROCESSING EQUIPMENT



-25°C to 315°C (-25°F to 600°F)

KEY FEATURES & BENEFITS

- **Safe for Health & Environment:** Contains no known carcinogens, is non-toxic, and is environmentally friendly.
- **Exceptional Wear Protection:** Guards against wear, friction, rust, and corrosion, extending the lifespan of bearings, chains, and equipment.
- **Reduced Carbonization & Oxidation:** Maintains optimal amperage, eliminates chain stretching and dragging, thus minimizing energy consumption.
- **Lower Evaporation & Volatility:** Stable at high temperatures, offering longer lubrication intervals, reduced lubricant consumption, and minimal smoke with no unpleasant odors.
- **High Flash Point:** With a high flash point, Petro-Gard FG-220 can be applied to hot or cold chains during production, enhancing productivity and reducing maintenance costs.
- **Fire Prevention:** Unlike lubricants with low flashpoint carriers, Petro-Gard FG-220 eliminates the risk of oven fires, ensuring a safe working environment for your operations.

PHYSICAL PROPERTIES

TEST METHOD

TYPICAL SPECIFICATION

ISO Grade	ASTM D445	220
SAE Grade	ASTM D445	50
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	350 (662°F)
Flash Point, °C (°F)	ASTM D92	315 (600°F)
Pour Point, °C (°F)	ASTM D97	-25
RBOT, min. (150°C)		1030
4-Ball Wear Test, 40 kg, 600 RPM, @ 204°C (400°F), 1 hr Average wear scar diameter, mm	ASTM D4172	0.48
4-Ball Wear Test, 40 kg, 1200 RPM, @ 204°C (400°F), 1 hr Average wear scar diameter, mm	ASTM D4172	0.58
Evaporation Loss, 6.5 hrs @ 204°C (400°F), %	ASTM D2595	1.0
Evaporation Loss, 24 hrs	ASTM D2595	5.87%
Weight Loss, 22 hrs @ 204°C (400°F), %	ASTM D972	2.0%
Weight Loss, 20 hrs @ 260°C (500°F), %	ASTM D972	29.0%
Residue %, 20 hrs, 260°C	ASTM D972	14
Density @ 25°C		0.97 @ 25°C
Pounds / Gallon		8.1 @ 25°C
Odor		Mild
Appearance	QL4099	Light Amber Liquid

REGULATORY STATUS

PETRO-GARD® FG-220

TSCA (USA)	✓
EINECS (EU)	✓
DSL (Canada)	✓
AICS (Australia)	✓
ECL (Korea)	✓
METI / ENCS (Japan)	
IECS (China)	✓
PICCS (Philippines)	✓
NSF Category Code	H1
NSF Registration Number	141244
Incidental Food Contact	Yes

STORAGE & HANDLING PRACTICES

Warehouse in unopened containers at ambient conditions. Under these conditions, storage life practically indefinite. For information on the safe handling and use of the product, refer to the Material Safety Data Sheet. For more information and availability, call or email:

(630) 513-6350
info@petrochem1.com