

## HIGH TEMPERATURE SYNTHETIC FOOD GRADE OVEN CHAIN LUBRICANT

### PRODUCT DESCRIPTION

Chain Guard Food Grade 220 H1 (CG-FS-220-H1) is a food grade, high temperature, ester based synthetic chain oil fortified with anti-wear additives and oxidant inhibitors that optimize the performance and stability of the lubricant. The natural detergency minimizes carbon buildup on chains contributed by conventional food grade PAO's, mineral, and vegetable based lubricants when exposed to higher temperature oven environments.

CG-FS-220-H1 has a high flash point and an operating temperature range of -25°C to 315°C (-13°F – 599°F). It is an NSF H1 food grade registered product that meets all regulations set out by the FDA (21 CFR 178.3750) and is approved for incidental contact with food in and around food processing areas.

### CHARACTERISTICS:

- ◆ Contains only NSF H1 approved food grade components
- ◆ Superior load and wear properties
- ◆ Excellent oxidative and thermal stability
- ◆ Reduced sludge and deposit formation
- ◆ Good water and rust resistance
- ◆ Very high flash point of 315°C (599°F)
- ◆ Low Volatility, High Solvency, & Low Maintenance



Nonfood Compounds  
Program Listed H1  
(Registration # 144460)

### SPECIFICATIONS & TYPICAL PROPERTIES:

Properties	Test Method	Specifications
ISO Grade	D445	220
Viscosity @ 40°C (104°F)	ASTM D445	220 cSt
Viscosity @ 100°C (212°F)	ASTM D445	19 cSt
Viscosity Index	ASTM D2270	96
Fire Point	ASTM D92	350°C (662°F)
Flash Point	ASTM D92	315°C (599°F)
Pour Point	ASTM D97	-25°C (-13°F)
Four Ball Wear, 40 Kg., 1200 rpm, 75°C, 1 hr., Scar Diameter	ASTM D 4172	0.64 mm
Four Ball Wear, 40 Kg., 600 rpm, 200°C, 1 hr., Scar Diameter	-	0.48 mm
Weight Loss (22 hrs, 204°C)	-	2.0%
Weight Loss (20 hrs, 260°C)	-	29%
Residue (20 hrs, 260°C)	-	20%
Typical RBOT @ 150°C, Oxidation Lifetime	ASTM D2272	1030 min
Appearance	-	Amber Liquid

### APPLICATIONS:

- ◆ Bakery Oven Chains
- ◆ Roller Ball Bearing Chains on Oven Conveyors
- ◆ Pin/Roller Chains on Tunnel & Tray Ovens
- ◆ Flour Tortilla Oven Chains
- ◆ Bagel Oven Chain
- ◆ Bread Oven Chain
- ◆ Roll Oven Chain
- ◆ Cookie Oven Chains
- ◆ Beverage Can Lines
- ◆ Cracker Oven Chains
- ◆ Cookie Oven Chains
- ◆ Any other high temperature food oven

TDS - CHAIN GUARD FOOD GRADE 220 H1 (CG-FS-220-H1)