



ISO-9001 Registered Quality System.
ISO-21469 Compliant.

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LUBRIPLATE HTCL-FG 220 & HTCL-FG 68

***NSF International H-1 Registered**

“These products are Halal Certified”

LUBRIPLATE HTCL-FG 220 & LUBRIPLATE HTCL-FG 68 are 100% ester based synthetic fluids specifically designed for use on oven chains in food manufacturing operations where incidental food contact is a possibility. The combination of an ashless additive system and the synthetic ester base provide protection against wear, rust, oxidation and corrosion. These products are NSF International H-1 Registered.

LUBRIPLATE HTCL-FG 220 & LUBRIPLATE HTCL-FG 68 are recommended for use on bakery oven chains, drying oven chains, tenter frame chains, heat-treating chains, paint curing oven chain applications where they are exposed to high operating temperatures and must maintain a clean lubricated surface.

LUBRIPLATE HTCL-FG 220 & LUBRIPLATE HTCL-FG 68 can be fed through micro lube systems, spray systems, mist systems, drip bottle systems and can be hand applied. When lubricating a hot chain, position the lubricator at the coolest point on the chain and use the minimum volume necessary to properly lubricate the chain. This will help prevent smoking of the lubricant once it reaches the hottest point in the oven.

Benefits of LUBRIPLATE HTCL-FG 220 & LUBRIPLATE HTCL-FG 68 are as follows:

- Eliminates carbon build-up on chains
- Does not contain harmful VOCs which pollute the atmosphere
- Advanced ester chemistry reduces friction, wear and energy costs
- High auto-ignition temperature to reduce the risk of oven fires >700°F
- Superior film strength reduces oil consumption and reduces smoke

Tests	HTCL-FG 220	HTCL-FG 68
Viscosity @ 40°C	223.8	68.2
Oven Test at 150°C		
Vis Change 24 hrs	226	68.9
Vis Change 48 hrs	229	70.9
Vis Change 72 hrs	247	72.3
Vis Change 96 hrs	264	74.6
Vis Change 120 hrs	270	74.6
TAN Change 24 hrs	0.12	0.11
TAN Change 48 hrs	0.21	0.15
TAN Change 72 hrs	0.22	0.20
TAN Change 96 hrs	0.23	0.23
TAN Change 120 hrs	0.26	0.28
Flash Point °C	302	302
Evaporation Loss 204°C/24 hours	2.05	2.45
TGA Wt Loss 250°C	0.13	0.23
Panel Cooker, 600°F, Residue, mg	18	13
4-Ball Wear Test 40 Kg, 600 rpm, 180°C	0.48	0.48
Viscosity @ 100°C cSt	19.6	10.7
Block On Ring COF	0.09	0.09
Ramsbottom, Carbon Residue	0.06	0.06
Specific Gravity @ 60°F		
Appearance	Clear, Pale Liquid	Clear, Pale Liquid

(Over for Application Information)

MAJOR APPLICATIONS INCLUDE:

- Drying Ovens
- Textile - Tenter Frame Chains
- Wallboard - Dryer Chains
- Painting - Dryer Chains
- Lithographic Chains - Beverage Can Lines
- Glass - Forming Line Chains
- Laminating - Drying Lines
- Food Cookers & Frying
- Heat Treating - Chains & Bearings
- Kiln Support Rollers - Cement Plants (Trunions)
- Bakery Oven Chains

HOW TO APPLY AND AT WHAT TEMPERATURE

- Micro Lube Systems $\pm 500^{\circ}\text{F}$
- Spray Systems $\pm 500^{\circ}\text{F}$
- Mist Systems $\pm 500^{\circ}\text{F}$ (Fire Safety precautions are necessary with this system when exposed to open flame).
- Drip Bottle Systems $\pm 500^{\circ}\text{F}$
- Drip Bottle with Brush $\pm 500^{\circ}\text{F}$
- Hand Applied $\pm 500^{\circ}\text{F}$ (Apply @ 250° or less to minimize smoke. Also run chain a few minutes to remove excess).

Note: To avoid heavy smoke, lube in small volumes with more frequency. The higher the temperature, the more important this becomes.

Where to lubricate a chain - (Lubricator positioning is important):

- Lube chains on slack side whenever possible.
- Lube at pin and roller (Pin Bush Joint).
- When lubing a hot chain; Position the lubricator at the coolest point or as close as possible.

Note: Know and understand the source of the heat to avoid fires. If you are in doubt contact *Technical Services at 1-800-347-5343.*

Our suggestion for establishing the lube cycle for automatic chain lubricators is to base it on amperage draws (an increase in friction). A simple high amp setting, activating a solenoid, signaling the lube motor (present for lube duration) to turn on. If you have any problems with systems of this nature, contact one of our Technical Staff.

Remember to advise your customer that this chain oil contains an ester and when first applied to a used chain, he may experience a heavy cleaning action and must deal with dirt, contaminants and rust coming off the used chain. This will last \pm two weeks and then the only thing coming off the chain will be a soft carbon when used in maximum temperature range.

Packaging Available

Ctn. 4/1 Gallon Jugs
5 Gallon Pail
55 Gallon Drum

HTCL-FG 220

L0947-057
L0947-060
L0947-062

HTCL-FG 68

L0946-060
L0946-062

***NSF International H-1 Registration No.**

143870

143869

Registered H-1 by NSF International for use in food processing facilities as a lubricant or anti-rust agent on equipment in which there may be incidental contact involving the lubricated part and the edible product.

ø**LUBRIPLATE HTCL-FG 220 & HTCL-FG 68** contain no components derived from TSE/BSE relevant animal species; therefore, they are compliant with the requirements of the TSE Note for Guidance EMA/410/01 Rev. 3 July 2011".