# 610



# **SYNTHETIC LUBRICATING FLUID**

# **Description**

Chesterton® 610 Synthetic Lubricating Fluid is a premium quality full synthetic lubricant designed to provide lubrication at temperatures ranging from -25°C (-15°F) to those over 270°C (520°F) where petroleum lubricants are unable to function.

Unlike petroleum based lubricants, the product will not carbonize, oxidize to a sludge or form lacquers and varnishes at high temperatures. In fact, 610 Synthetic Lubricating Fluid has excellent solvency and will actually remove many of these byproducts caused by other petroleum base lubricants and allow equipment to run cooler and more efficiently. When operating at temperatures beyond its capability, the product will simply evaporate cleanly.

Chesterton 610 Synthetic Lubricating Fluid is excellent for lubrication of equipment operating at elevated temperatures such as oven chains, motors, anti-friction bearings, paint curing and drying ovens, low loading gear boxes, ceramic ovens, oven door hinges and for low temperature applications to -25°C (-15°F) in refrigerated or winter conditions.

# **Composition**

Chesterton 610 Synthetic Lubricating Fluid begins with a polyolester base. This provides much greater stability and far less volatility than the diester base commonly used in most other industrial synthetic lubricants. At equivalent temperatures above 270°C (520°F), the diester base lubricants will lose over 5 times as much product through evaporation as the 610 Synthetic Lubricating Fluid.

A proprietary additive package is added to the product to enhance its performance and give properties that far exceed those of most petroleum based products. Extreme pressure additives give superior wear characteristics and minimize equipment maintenance and downtime. Rust and oxidation inhibitors give added protection against corrosion. Lubricity additives provide for maximum lubrication and minimum friction.

Typical Physical Properties	610
Appearance	Amber Liquid
Odor	Slight, Sweet
ISO VG (ASTM D 2422, DIN 51 519)	68
Specific Gravity	0.97
Viscosity (ASTM D 445, DIN 51 561) @ 40°C (104°F) cSt (mm²/s) @ 100°C (212°F) cSt (mm²/s)	61-75 10-15
Viscosity Index (ASTM D 2270, ISO 2909)	150
Four Ball Wear, Scar Diameter 75°C, 1200 RPM 1 hr (ASTM D 2266, DIN 51 350) 10 kg 40 kg	0.22 mm 0.38 mm
Temperature Range	-25°C to 270°C (-15°F to 520°F
Pour Point (ASTM D 97, ISO 3016)	-40°C (-40°F
Flash Point, C.O.C. (ASTM D 92, ISO 2592)	282°C (540°F
Fire Point (ASTM D 92, ISO 2592)	338°C (640°F
Evaporation Loss, 6 1/2 Hours @ 204°C (400°F) (ASTM D 972)	1.2%

Because Chesterton 610 Synthetic Lubricating Fluid has a high flash point and low evaporation rate, it does not have the characteristic smoke and fire hazards associated with petroleum base lubricants when used in hot applications. The safety level for the user is thus very high.

The components of 610 Synthetic Lubricating Fluid are considered more readily biodegradable than petroleum based products and should not be detrimental to the environment.

#### Features

- Wide temperature range
- Self cleaning
- 100% synthetic
- No residue
- Non-carbonizing
- Non-oxidizing
- NSF H2 Registration number 133971 (bulk) and 133972 (aerosol)
- Low evaporation rate
- High flash point
- Biodegradable

# **Applications**

Equipment operating in elevated temperatures, refrigerated areas, and in severe environments. Excellent for increasing the efficiency of anti-friction bearings, impregnated bearings, textile tenter frames, low loading gear boxes, oven hinges and chain conveyors. Lubricates at sub-zero temperatures where greases congeal.

### **Directions**

Apply by spraying or using a squirt oiler or oil can with extended spout. Apply at each bushing or lubrication site. Reapply as needed.

# Safety

Before using this product, please refer to the Safety Data Sheet (SDS) or appropriate safety sheet for your area.

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