



Lubrication Technology



EXTENDING CHAIN LIFE

Chain "stretch" is a result of wear on the pin and bushing, requiring costly chain adjustments or replacement. Conventional lubricants do not penetrate tight tolerances and, therefore, provide minimum benefit.

Chesterton offers a broad range of lubricants specifically for chains. Our chain lubricants penetrate pin and bushings, providing critical lubrication. Chesterton lubricants also provide solutions to:

- Increase chain life
- Reduce energy consumption
- Reduce lubricant usage

- Increase load carrying capability
- Acceptable in food, pharmaceutical and beverage industries
- Penetrate into fine tolerances

Primary Chain Lubricants

601 Chain Drive Pin and Bushing Lubricant

Premium, Low Viscosity Lubricant

Premium-quality oil that penetrates between the close clearance of chain drive pin and bushings to provide critical lubrication.

-23°C - 150°C (-10°F - 300°F)

610 Plus, 610 MT Plus, 610 HT

Synthetic Lubricating Fluid

Premium-quality oil that penetrates between the close clearance of chain drive pin and bushings to provide critical lubrication.

Up to 270°C (520°F) 610 Plus—ISO VG 68 610 MT Plus—ISO VG 220 610 HT—ISO VG 460

660 Silicone Lubricant

Low Viscosity Penetrating Food-Grade Lubricant

A clear, silicone fluid that provides a continuous film lubrication for mechanical parts and sliding surfaces ideally of plastic, rubber, or metal; will not stain or leave gummy residues. **NSF H1**

-40°C - 205°C (-40°F - 400°F)

For high temperature, low speeds, and heavy loads.

690 Food Grade Lubricant

USP White Food-Grade, High-Penetrating Lubricating Oll

Premium quality, light oil that penetrates between the close clearance of precision parts, such as chain bushings and pins, to provide critical lubrication. **NSF H1**

-9°C – 120°C (15°F – 250°F)

715 Spraflex® and 715 Spraflex® Gold

Adhesive Surface Lubricant

Provides long lasting, non-extruding "wear shield" to protect equipment operating under heavy loads.



MAXIMIZING WIRE ROPE AND CABLE PERFORMANCE

Chesterton's unique 2-part treatment for close metal to metal tolerances provides long lasting, nondrying lubrication, allowing wire rope and cable to run smoothly with less wear and reduced energy costs. Chesterton lubricants can:

- Increase the life of wire rope and cables
- Eliminate lubricant squeeze out and wipe off
- Reduce stretch and strand breakage

601 Chain Drive Pin and Bushing Lubricant

Penetrates to the core for critical internal lubrication

715 Spraflex® or 715 Spraflex® Gold

Seals surface protecting against wet/high wear conditions

630 SXCF/630 SXCF 220 #1/635 SXC

Synthetic, extreme pressure, and corrosion resistant grease. Injectable grease for wire lubrication.

- 630 SXCF is NSF H1
- 630 SXCF 220 #1 is NSF H1



Lubrication Technology



IMPROVING BEARING RELIABILITY

Chesterton's bearing lubrication solutions address the primary causes of bearing failure, offering you the ability to significantly improve operational reliability and lower your maintenance and production costs.

- Excellent corrosion protection
- High load carrying ability
- Best-in-class water and chemical washout resistance
- QBT[™] Quiet Bearing Technology
- Automatic grease dispensing
- Reduced lubricant consumption



Sixty-four percent of bearing failures are lubrication related. Less than 9% of bearings reach their design life expectancy—L10. Source: ABMA (American Bearing Manufacturers Association)

Automatic Single Point Lubricators

Automatically dispense Chesterton grease to critical areas, eliminating over and under greasing.

Lubri-Cup™ EM

- Microprocessor controlled, "pulse" delivery system
- Operates up to 12 months
- Replaceable service packs
- Lubricates up to 8 bearings up to 6 m (19 feet) away
- Sealed microprocessor
- -15°C 60°C (5°F 140°F)

Lithium ion battery for temperatures down to -40 $^{\circ}$ C (-40 $^{\circ}$ F)

Lubri-Cup EM

Lubri-Cup™ VG—250cc

- Microprocessor-controlled, "pulse" delivery system
- Nitrogen gas-operated unit
- Variable timer
- Disposable unit
- High performance
- Easy to set up and operate

Lubri-Cup™ VG Mini—120cc

- Transparent container for lubricant inspection
- Reliable lubrication system
- Ability to turn on and off



Lubri-Cup™ VG Mini – 250cc

Lubri-Cup™ VG Mini – 120cc

LUBRI-CUP VG

Special Models

Lubri-Cup™ EM-X

UL Certified for equipment used in potentially hazardous locations

Lubri-Cup™ EM-S, EM-SP

Synchronized to lubricate only when machine is operating

Lubri-Cup™ EM-VS

Designed with vibration sensor to only lubricate when equipment is on.



Lubri-Cup EM-VS





Advanced Grease Technology Selection Guide

Chesterton's industrial greases offer extended bearing life and reliability even under the harshest conditions of load, temperature, water and corrosion.

Industrial Grade Grease									
Name	Thickener	Base Oil	NLGI Grade	Base Oil Viscosity ISO VG	Dropping Point ASTM D2265	Service Temp	Four Ball Wear Weld Load, ASTM D2596	Water Washout Resistance ASTM D1264	Corrosion Resistance ASTM B117
613 Moly Grease	Lithium Complex	Mineral	2	150	304°C (580°F)	-18°C – 150°C (0°F – 302°F)	500 Kg	<1.0	300 hours @50 microns
615 HTG #1	Calcium Sulfonate Complex	Mineral	1	100	300°C (572°F)	-45°C – 204°C (-50°F – 400°F)	620 Kg	<1.0	>1000 hours @50 microns
615 HTG #2	Calcium Sulfonate Complex	Mineral	2	100	318°C (604°F)	-40°C – 204°C (-40°F – 400°F)	620 Kg	<0.5	>1000 hours @50 microns
615 HTG #2-460	Calcium Sulfonate Complex	Mineral	2	460	>300°C (572°F)	-40°C – 204°C (-40°F – 400°F)	500 Kg	<3.0	>1000 hours @50 microns
633 SXCM	Calcium Sulfonate Complex	Synthetic (PAO)	1	32	280°C (550°F)	-50°C – 250°C (-58°F – 482°F)	800 Kg	<2.0	>1000 hours @50 microns
635 SXC	Calcium Sulfonate Complex	Synthetic (PAO)	2	100	318°C (604°F)	-40°C – 240°C (-40°F – 464°F)	800 Kg	<0.05	>1000 hours @50 microns
Food Grade Grease									
				Food G	rade Grease				
Name	Thickener	Base Oil	NLGI Grade	Food G Base Oil Viscosity ISO VG	Dropping Point ASTM D2265	Service Temp	Four Ball Wear Weld Load, ASTM D2596	Water Washout Resistance ASTM D1264	Corrosion Resistance ASTM B117
Name 622 White Grease	Thickener Aluminum Complex	Base Oil Mineral	_	Base Oil Viscosity	Dropping Point		Wear Weld Load,	Washout Resistance ASTM	Resistance
622 White	Aluminum		Grade	Base Oil Viscosity ISO VG	Dropping Point ASTM D2265	Temp -23°C − 170°C	Wear Weld Load, ASTM D2596	Washout Resistance ASTM D1264	Resistance ASTM B117 500 hours
622 White Grease	Aluminum Complex Calcium Sulfonate	Mineral	Grade 2	Base Oil Viscosity ISO VG	Dropping Point ASTM D2265 245°C (473°F) 318°C	Temp -23°C - 170°C (-10 - 338°F) -30°C - 204°C	Wear Weld Load, ASTM D2596	Washout Resistance ASTM D1264	Resistance ASTM B117 500 hours @50 microns >1000 hours
622 White Grease 625 CXF	Aluminum Complex Calcium Sulfonate Complex	Mineral Mineral Synthetic Mineral (PAO)	Grade 2 2	Base Oil Viscosity ISO VG	Dropping Point ASTM D2265 245°C (473°F) 318°C (604°F)	Temp -23°C - 170°C (-10 - 338°F) -30°C - 204°C (-22 - 400°F) -34°C - 204°C	Wear Weld Load, ASTM D2596 250 Kg 620 Kg	Washout Resistance ASTM D1264 2.45	Resistance ASTM B117 500 hours @50 microns >1000 hours @50 microns 50 hours

Chesterton 615 High Temperature Greases

HTG #1, HTG #2, and HTG #2-460

- Superior water resistance
- Excellent corrosion protection
- Compatible with most popular greases
- Exceptional shear resistance
- Outstanding extreme pressure and temperature characteristics
- HTG #1 is easily pumpable in automatic grease dispensing systems
- HTG #2 460 is ideal for large, low speed bearings



Chesterton 635 Synthetic, Extreme-Pressure, Corrosion-Resistant Grease

- Superior water washout resistance
- Excellent corrosion protection
- Compatible with most popular greases
- Exceptional shear resistance
- Anti-oxidants prevent hardening or crystallization
- Dropping point 318° C (604° F)
- QBT[™] Quiet Bearing Technology
- Ideal for electric motors





Lubrication Technology



PROTECTING OPEN GEARS

Chesterton's open gear lubrication solutions provide excellent wear resistance and load carrying capability.

- No lubricant squeeze out
- Reduced lubricant consumption
- Best-in-class water and chemical washout resistance

715 Spraflex®

A cohesive, high film strength lubricant. Asphaltic, polymer modified base oil.

715 Spraflex® Gold

Synthetic, clear lubricant bonds to wet metal, corrosion resistant, adhesive resistant



TROUBLE-FREE THREADED ASSEMBLIES

Chesterton's threaded assembly lubrication solutions keep bolts from seizing, allowing proper assembly and easing disassembly.

- Microscopic solid lubricants—do not wipe off
- Solid lubricants withstand extreme pressure—prevents galling
- Balanced coefficient of friction—supports proper bolt tension
- Reduced breakaway torque for quicker disassembly

710 Anti-Seize Compound

Our original and most valued anti-seize. Copper based 1100°C (2000°F)

723/723 FG Sprasolvo

Fast acting penetrating oil that frees frozen nuts, bolts and fittings without damage to the base metal. 723 FG is **NSF H1** for food plant use.

725 Nickel Anti-Seize Compound

Chemical resistant, hard nickel particles lubricate under most extreme industrial conditions. Superior performance for all metals.

Up to 1425°C (2600°F)

783 ACR

Exceptional corrosion protection and water wash-out resistance, used plant-wide

Up to 900°C (1650°F)

785/785 FG Parting Lubricant

Proprietary solid lubricants, no heavy metals. Replaces Nickle and Copper products. 785 FG is **NSF H1**, for food plant use. Clean and non-staining

Up to 1204°C (2200°F)

772 Premium Nickel Anti-Seize

For specialty applications and alloy where Halogen, Sulfur, and low melting point metals are restricted.



OPTIMIZING PNEUMATIC RELIABILITY

Chesterton's pneumatic lubrication solutions dramatically improve the reliability of your pneumatic equipment and can reduce maintenance costs by as much as 80%.

- Advanced petroleum based technology
- Absorbs condensed water
- Lower friction—faster cycle time, reduced heat, and lower air cost
- Protects against clogged solenoids and sticking air tools
- Removes rust, sticky residues, and dirt
- Reduces lubricant consumption
- Increases packing/sealing ring life
- Lowers energy costs

652 Pneumatic Lubricant and Conditioner

Direct replacement for existing pneumatic oils, compatible with all oil-based systems, ashless, contains no heavy metals





MINIMIZING FRICTION AND WEAR IN EXTREME PRESSURE APPLICATIONS

Chesterton's lubrication solutions for extreme pressure applications will not liquefy under extremely high loads and temperatures. Ideal for press fits.

- Microscopic solid lubricants—do not wipe off
- Prevent wear, galling, and seizure
- Ideal for press fits and slip fits
- Low coefficient of friction
- Suitable for screws, worm drives, stem nut lubrication, and actuators

787 Sliding Paste

Microscopic graphite and molybdenum disulfide solid particles lubricate under most extreme industrial conditions of pressure and temperature

23°C - 538°C (-10°F - 1000°F)



STABILIZING CONTROL VALVES

Chesterton's control valve lubrication solutions enables reliable valve actuation.

- Excellent corrosion protection
- Best-in-class water washout resistance
- Long-term stability

- Unsurpassed anti-wear and extreme pressure resistance
- Lubricates bearing, gears, and MOV mechanisms

615 HTG #1 and 615 HTG #2

Outstanding extreme pressure capabilities, oxidation inhibited for motor-operated valves

652 Pneumatic Lubricant and Conditioner

Provides critical liquid lubrication for air operated valves

625 CXF

Food grade, mineral oil, extreme pressure, and corrosion resistant grease. **NSF H1**

787 Sliding Paste

Lubricates under extreme industrial conditions of pressure and temperature

630 SXCF 220-#1

Food grade, synthetic, extreme pressure and corrosion resistance grease. NLGI #1 for higher pumpability. **NSF H1**

630 SXCF

Food grade, synthetic, extreme pressure, and corrosion resistant grease. **NSF H1**

635 SXC

Synthetic, extreme pressure, and corrosion resistant grease





Global Solutions, Local Service

Since its founding in 1884, the A.W. Chesterton Company has successfully met the critical needs of its diverse customer base. Today, as always, customers count on Chesterton solutions to increase equipment reliability, optimize energy consumption, and provide local technical support and service wherever they are in the world.

Chesterton's global capabilities include:

- Servicing plants in over 113 countries
- Global manufacturing operations
- More than 500 Service Centers and Sales Offices worldwide
- Over 1200 trained local Service Specialists and Technicians

Visit our website at



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Chesterton ISO certificates available on chesterton.com/corporate/iso

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