

710

ANTI-SEIZE COMPOUND

Description

Chesterton® 710 Anti-Seize Compound is an anti-seize compound and assembly lubricant combining the high temperature, extreme pressure, and corrosion resistant properties of colloidal copper, aluminum and graphite in an oil based suspension that will not burn, scrape or wash-off.

The product seals and protects metal parts under extreme conditions by providing an ultra-thin coating of copper particles. The fine colloidal particles coat and separate metal parts, thus retarding pitting from galvanic action between dissimilar metals and the microwelding that could occur if asperities in the metal were not kept apart.

Because 710 Anti-Seize Compound has a balanced coefficient of friction, threads are not stretched and more accurate load values are possible during assembly. The product saves threads and parts for reuse by preventing galling damage and breakage during opening.

Chesterton 710 Anti-Seize Compound meets MIL-A-907D and is on the U.S. Navy qualified products list QPL-907. It is NSF registered for use in federally inspected meat and poultry plants.

Composition

Chesterton 710 Anti-Seize Compound was formulated to blend the correct proportion of copper, aluminum and graphite to provide a coefficient of friction similar to that of bare steel. This ensures more accurate loading and eliminates the stretching and damage of metal threads seen with other high graphite or MoS₂ anti-seizes which over-lubricate.

The raw materials in 710 Anti-Seize Compound each provide a unique function and significantly contribute to the efficacy of the product. The base of copper particles acts as tiny "ball bearings" that roll between threaded parts preventing galling or breakage. The correct graphite addition provides lubrication and balances the coefficient of friction. The aluminum additive gives additional lubricating properties at temperatures where graphite is no longer effective (above 620°C [1150°F]).

Typical Physical Properties

Form	Soft paste	
Color	Copper	
Average Particle Size	4 to 7 microns	
NLGI Grade	(ASTM D 217, DIN 51 518)	1
Specific Gravity	(DIN 51 757)	1.3
Flash Point	85°C (185°F)	
Dropping Point	(ASTM D 566, ISO 2176)	>204°C (>400°F)
Coefficient of Friction	(ASTM D 2266, DIN 51 350)	.08
Coefficient "K" Factor	.20	
Extreme Pressure Capability	(ASTM D 2783, DIN 51 350)	8195 kg/cm ² (116,564 psi)
Temperature Range	Up to 1100°C (2000°F)	

Applications

Use on steel, stainless steel, iron, copper, brass, titanium, etc. Do not use on oxygen systems or in presence of acetylene. Listed below are several specific applications:

Automotive Industry - For metal gaskets, studs in cylinder heads, valve guides, u-bolts, etc. Diesel engine bolts, flanges, fittings.

Foundry - For coating molds before pouring in metal to prevent sticking and breakage.

Utilities - Underground and high pressure valves, fittings and shut-off valves.

Machine Shops - Solder iron release, torque wrench accessory, cranes, conveyers, etc.

Plumbing - For high pressure, threaded or flanged joints.

Pumps - On flanges, bolts and fittings for high temperature applications.

Lift Trucks - Lubrication and corrosion protection for bearings, sprockets, chains and wear surfaces.

Furnaces - On heat-treat furnaces and foundry operations to prevent seizure of fasteners on parts due to high temperatures.

On stainless steel at higher temperatures and on aluminum, it is recommended to use Chesterton® 725 Nickel Anti-Seize Compound or Chesterton® 785 Parting Lubricant for the rubber molding industry, for salt water applications, and in aggressive acid or alkaline environments.

Features

- Ultra-Fine Particle Size
- Balanced Coefficient of Friction
- Withstands Extreme Pressure, Extreme Temperatures
- Good Electrical Conductivity Between Surfaces
- Guards Against Corrosion
- NSF H2 - Registration number 133958 (bulk)
- Meets MIL-A-907D
- US Navy Qualified Products List QPL-907

Directions

Treat all threaded or press-fit parts before joining to make assembly and disassembly easier. Surfaces should be free from dirt, oil, grease, etc. Apply liberally to mating surfaces.

Safety

Before using product, review the Material Safety Data Sheet (MSDS) or appropriate safety sheet for your area.

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860 Salem Street
Groveland, Massachusetts 01834 USA
Tel: (781) 438-7000 • FAX: (978) 469-6528

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