

725

NICKEL ANTI-SEIZE COMPOUND

Description

Chesterton® 725 Nickel Anti-Seize Compound is an assembly lubricant combining the extreme pressure, corrosion resistant anti-seize abilities of colloidal nickel, aluminum and graphite in an oil suspension which will withstand temperatures up to 1425°C (2600°F).

The product seals and protects metal parts under extreme conditions by providing an ultra-thin coating of nickel particles. The particles form an anti-friction barrier that will not burn, wash or scrape off. The barrier formed prevents pitting from the galvanic action between dissimilar metals that could occur if the metals were not separated.

“Nickel plating” of parts means that opposing surfaces that could otherwise self-weld under extreme conditions are not frozen in place. Because nickel is a hard metal, it will withstand severe pressures without flattening or hardening. The microscopic asperities on metal parts do not come in contact as the ultra-fine nickel particles fill surface irregularities and keep them separated.

Because Chesterton 725 Nickel 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.

725 Nickel Anti-Seize Compound will not wash off in either fresh or salt water. It can be used indoors, outdoors and in marine applications. The product meets MIL-A-907D.

Composition

Most anti-seize compounds on the market today defeat their primary purpose by over-lubricating and allowing parts to become so tightly joined that they are then unable to be disassembled. Chesterton 725 Nickel Anti-Seize

Typical Physical Properties

Form	Soft paste	
Color	Metallic gray	
Average Particle Size	4 - 7 microns	
Temperature Range	Up to 1425°C (2600°F)	
Coefficient of Friction	“K” Factor (static)	0.18
	ASTM D 2266 (dynamic)	0.12
Density	1,3 kg/l (10.7 lbs/gal)	
Specific Gravity	1.3 kg/l	
Copper Corrosion	ASTM D 130 100°C (212°F)	No corrosion
Dropping Point	ASTM D 566	>316°C (600°F)
Water Washout	ASTM D 1264 79°C (175°F)	5.5%
Flash Point, Bulk	95°C (204°F)	
Penetration, Cone	ASTM D 217	27 to 37 mm

Compound blends the optimum particle sizes of nickel, aluminum and graphite in a balanced proportion to match the coefficient of friction to that of bare steel. This is a key parameter of an anti-seize compound ensuring bolts are not over-loaded, stretched and thus damaged for further use.

Extremely fine nickel powder is used in this anti-seize compound not as an additive but as a primary ingredient. There is such a significantly higher percentage of nickel in Chesterton® 725 Nickel Anti-Seize Compound versus other nickel anti-seizes that the color difference can be seen with the naked eye. While other products are primarily graphite, 725 contains only enough to balance the coefficient of friction.

Aluminum is used in Chesterton 725 Nickel Anti-Seize Compound to provide a sacrificial anode to protect against galvanic corrosion. At higher temperatures above 538°C (1000°F), the molten aluminum also provides improved lubrication properties over that seen with nickel alone.

Applications

Eases mechanical assembly of bolts, studs, flanges, press fits, pump sleeves, valve stems, screws, bushings, gaskets, bearings, etc. up to 205°C (400°F). Eases disassembly by preventing seizure and inhibiting rust and corrosion up to 1425°C (2600°F). Saves threads and parts for reuse by preventing galling damage and breakage during opening. Use on steel and stainless steel, iron, aluminum, copper, brass, titanium, etc. in the automotive and chemical industries, in foundries, utilities, and refineries.

Should not be used on oxygen systems.

Features

- Ultra-Fine Particle Size
- Withstands Extreme Pressure
- Corrosion Resistant
- Meets MIL A-907D
- NSF H2 - Registration number 133959
- Effective to 1425°C (2600°F)
- Applicable where use of copper is prohibited
- Water Resistant

Directions

Surfaces should be free from dirt, oil, grease, moisture, rust, lint etc. Apply liberally to mating surfaces.

Safety

Before using product, review the Material Safety Data Sheet (MSDS) or the 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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