

772

PREMIUM NICKEL ANTI-SEIZE COMPOUND

Description

Chesterton® 772 Premium Nickel Anti-Seize Compound is formulated with ultra pure raw materials. This permits 772 Premium Nickel Anti-Seize Compound to conform to most applicable equipment specifications which restrict the levels of halogens, sulfur and low melting point metals.

Chesterton 772 Premium Nickel Anti-Seize Compound is an assembly lubricant combining the extreme pressure, corrosion resistant anti-seize abilities of colloidal nickel 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 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.

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.

Chesterton 772 Premium 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.

772 Premium 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-907F.

Typical Physical Properties

Appearance		Black
Form		Soft paste
Specific Gravity		1.47
Particle Size		4-7 microns
NLGI		1
Penetration	(ASTM D 217, ISO 2137)	330
Dropping Point	(ASTM D 566, ISO 2176)	>316°C (600°F)
Temperature Range		Up to 1425°C (2600°F)
Extreme Pressure	(ASTM D 2596, DIN 51 350)	7136 kg/cm ² (101,505 psi)
Weld Point	(ASTM D 2596, DIN 51 350)	500 kgf
"K" Factor	Skidmore - Wilhelm Method	0.16
LWI	(ASTM 2596, DIN 51 350)	100
Water Washout	(ASTM D 1264) 79°C (175°F)	2.6%

Composition

Chesterton 772 was formulated using unique and proprietary solid lubricants. The geometry of these particles in 772 are such that they roll over each other and coat metal surfaces to prevent galling during assembly of threaded parts and mating surfaces.

Because the particles are ultra-fine, they spread evenly and fill surface profiles to prevent metal to metal contact and insure thorough coverage. Chesterton 772 Premium Nickel Anti-Seize Compound blends the optimum particle sizes of nickel 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.

Applications

Eases mechanical assembly of bolts, studs, flanges, press fits, pump sleeves, valve stems, screws, bushings, gaskets, bearings, etc. 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-907F
- Certified lot analysis
- Effective to 1425°C (2600°F)
- Applicable where use of copper is prohibited
- Water Resistant
- GE TIL 1117-3R1
- GE D50YP12
- GE NEDC-31735P

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.

Maximum Bolt Service Temperatures*

General Classification	"ASTM" Symbols	"JIS" Symbols	Service Temp
Mild Steel		G3101-SS41	260° C (500°F)
Carbon Steel	A307-B	G4051-S250	420° C (788°F)
5Cr-1/2Mo	A193-B5	G4107-SNB5	600° C (1112°F)
1Cr-1/5Mo	A193-B7	G4107-SNB7	550° C (1022°F)
Cr-Mo-Va	A193-B16	G4107-SNB16	600° C (1112°F)
18Cr-8Ni	A193-B8	G4303-SUS304	800° C (1472°F)
18Cr-10Ni-Cb	A193-B8C	G4303-SUS347	800° C (1472°F)
18Cr-10Ni-Ti	A193-B8T	G4303-SUS321	800° C (1472°F)
18Cr-12Ni-2Mo	A193-B8M	G4303-SUS316	800° C (1472°F)
15Cr-25Ni-Mo-Ti-V-B	A453-660		540° C (1004°F)

*USE OF THREAD PASTES WILL NOT EXTEND SERVICE TEMPERATURE OF FASTENERS/BOLTS.
CONSULT BOLTING SUPPLIER FOR PROPER TEMPERATURE AND TENSION LIMITS.

772 Premium Nickel Anti-Seize Typical Analysis Results:

	ppm	Total:	ppm
Antimony	<20	Chloride	23
Arsenic	<10	Fluoride	<10
Bismuth	<20	Sulfur	10
Mercury	<0.5	Bromide	<10
Tin	<20	Iodide	<10
Cadmium	<5	Phosphorus	<10
Copper	<5	Water Leachable:	
Indium	<10	Chloride	<5
Lead	<10	Fluoride	<5
Silver	<5	Sulfur	<5
Zinc	<5	Bromide	<5
Gallium	<10	Iodide	<5
Total Metals	None detected	Phosphorus	<5
		Extractable:	
		Nitrite	<0.5
		Nitrate	<0.5

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