



Loctite® brand anti-seize compounds are a group of premium quality products, developed to protect metal parts from rust, corrosion, galling, and seizing. They ease assembly and disassembly of slip-fit, press-fit, and threaded joints and reduce friction and wear on critical operating equipment. Formulated for severe industrial environments, these products protect against high temperatures, heavy loads, chemicals, pounding, and vibration.

ANTI-SEIZE

Loctite® C5-A® Copper Based Anti-Seize Lubricant

Exclusive formula suspends copper and graphite in a high quality grease. Protects metal parts from rust, corrosion, galling, and seizing at temperatures to 1800°F (982°C). Tested to MIL-PRF-907E.



Loctite® C5-A® Copper Anti-Seize Stick

The same trusted performance characteristics as the Loctite® C5-A® Copper Based Anti-Seize paste in a convenient semi-solid stick form. Stick package offers more portability and less mess. Tested to MIL-PRF-907E and CFIA approved.



Loctite® Silver Grade Anti-Seize

Heavy duty, temperature resistant, petroleum-based lubricant compound fortified with graphite and metallic flake. Inert, will not evaporate or harden in extreme cold or heat. For use in assemblies up to 1600°F (871°C). Tested to MIL-PRF-907E. Approved by the American Bureau of Shipping and CFIA.

Loctite® Silver Grade Anti-Seize Stick

New semi-solid stick offers the same performance characteristics as the Loctite® Silver Grade Anti-Seize paste in a convenient semi-solid stick form. Stick package offers more portability and less mess. Tested to MIL-PRF-907E and CFIA approved.

Loctite® Nickel Anti-Seize

Copper-free. Recommended for stainless steel and other metal fittings. For preventing corrosion, seizing, and galling in harsh, chemical environments, and temperatures to 2400°F (1315°C). Approved by the American Bureau of Shipping.

Loctite® Heavy Duty Anti-Seize

Metal-free. Excellent lubricity. Provides outstanding lubrication to all metals including stainless steel, aluminum, and soft metals up to 2400°F (1315°C).

Loctite® Moly Paste

Very low friction. Lubricates press fits, protects during break-in and under high static loads up to 750°F (400°C). Allows maximum clamping from available torque.

Loctite® Marine Grade Anti-Seize

Formulated to protect assemblies exposed directly or indirectly to fresh and salt water, Loctite® Marine Grade Anti-Seize works especially well in high humidity conditions. It has excellent lubricity, superior water wash-out and water spray resistance, and prevents galvanic corrosion. Protects in temperatures from -20°F to 2400°F (-29°C to 1315°C). Approved by the American Bureau of Shipping.

Loctite® Graphite-50™ Anti-Seize

Electrically conductive, non-metallic. Temperature resistant up to 900°F (482°C). Highly electrically conductive in metal-to-metal joints.

Loctite® Moly-50™ Anti-Seize

General purpose, thread lubricant. Temperature resistant to 750°F (400°C). Provides excellent lubricity. Meets the performance requirements of MIL-PRF-83483.

Loctite® Zinc Anti-Seize

Protects aluminum and ferrous surfaces from seizure and corrosion up to 750°F (400°C).

Loctite® Food Grade Anti-Seize

Prevents seizure, galling, and friction in stainless steel and other metal parts up to 750°F (400°C). NSF H1 approved for incidental food contact.

Loctite® N-1000™ High Purity Anti-Seize

Certified pure. Copper-based. Suitable for critical, long-term, stainless steel applications and high-nickel, alloy bolting. Recommended for protecting Class 2 and 3 power plant hardware. Temperature resistant to 1800°F (982°C).

Loctite® N-5000™ High Purity Anti-Seize

Nickel-based. Lubricates and protects Class 1, 2 and 3 power plant hardware. Recommended for highly corrosive environments to 2400°F (1315°C).

Loctite® High Performance N-5000™ High Purity Anti-Seize

Nickel-based. Maximum lubricating and anti-seize properties for Class 1, 2 and 3 power plant hardware. Temperature resistant to 2400°F (1315°C).

Loctite® N-7000™ High Purity Anti-Seize

Metal-free formulation provides high levels of purity and excellent lubricating properties. For Class 1, 2 and 3 power plant hardware. Temperature resistant to 2400°F (1315°C).

Loctite® White Hi-Temp Anti-Seize

A general purpose non-metallic formulation that protects against high temperature seizing and galling of mated metal parts, up to 2000°F (1093°C). White in color, it has excellent lubricity and can be used on various metals such as copper, brass, cast iron, steel, and all alloys including stainless steel.



Torque guide

Proper clamp load is an essential part of any bolted assembly for trouble-free operations.



Torquing either nut or bolt creates the clamp load. An anti-seize lubricant used on a bolt helps to develop greater clamp load for the same torque compared to an unlubricated bolt. An additional benefit is greater uniformity in clamp load among a series of bolts. The relationship between torque and clamp load is expressed in the following equation:

Where:

- T = KFD
- T = Torque (in-lb, ft-lb, N-m)
- F = Clamp Load (lb, N)
- D = Nominal diameter of bolt (in, ft, m)
- K = Torque coefficient or nut factor, determined experimentally

K Factors: K factors are obtained on Grade 8, 1/2" steel bolts and grade 5 nuts by a test procedure which measures torque tension properties. Lubricant was applied to the bolt threads and both faces of the washer.

See the Properties Chart for the torque coefficient or K value for the anti-seize compounds.

Henkel Corporation believes that this data fairly represents performance to be expected. However, Henkel makes no warranty of specific performance on any individual fastener. In critical applications, it is necessary to determine K values independently.

Note: There are two "coefficients" used to express the relationship between torque and tension: torque coefficient (also called "nut factor") is the most commonly used. A different concept is the "friction coefficient," which has value 2/3 (or 67%) of the torque coefficient.

LOCTITE® BRAND ANTI-SEIZE PROPERTIES CHART

PRODUCT	Item Number	Container	Temperature Resistance	Color	K Value
C5-A® Copper Based Anti-Seize Lubricant	51299	2 gm pouch	1800° F (982°C)	Copper	0.16
	51277	7 gm pouch			
	51001	1 oz. tube			
	51002	4 oz. tube			
	51144	4 oz. brush-top can			
	51147	8 oz. brush-top can			
	39647	8 oz. brush-top metal can			
	51005	10 oz. brush-top can			
	51003	12 oz. aerosol			
	51004	13 oz. cartridge			
	51006	1 lb. can			
	51007	1 lb. brush-top can			
	39643	1 lb. brush-top metal can			
	51008	2.5 lb. can			
	51009	8 lb. can			
38584	25 lb. pail				
51011	42 lb. pail				
51146	425 lb. drum				
NEW C5-A® Copper Anti-Seize Stick	37229	20 gm stick	1800°F (982°C)	Copper	0.16
Silver Grade Anti-Seize	38181	7 gm pouch	1600°F (871°C)	Silver	0.18
	80209	4 oz. brush-top can			
	76732	8 oz. brush-top can			
	76759	12 oz. aerosol			
	76764	1 lb. brush-top can			
	80206	1 gal. can			
76775	5 gal. pail				
NEW Silver Grade Anti-Seize Stick	37230	20 gm stick	1600°F (871°C)	Silver	0.18
Nickel Anti-Seize	77124	8 oz. brush-top can	2400°F (1315°C)	Silver	0.13
	51286	12 oz. aerosol			
	51102	1 lb. can			
	77164	1 lb. brush-top can			
	51152	8 lb. can			
77175	5 gal. pail				
Moly-50™ Anti-Seize	51094	1 lb. can	750°F (400°C)	Black	0.13
Zinc Anti-Seize	39901	1 lb. can	750°F (400°C)	Grey	0.15
Graphite-50™ Anti-Seize	51084	1 lb. can	900°F (482°C)	Black	0.13
Heavy Duty Anti-Seize	51609	1 oz. tube	2400°F (1315°C)	Black	0.16
	51605	9 oz. brush-top can			
	51606	1.2 lb. brush-top can			
	51607	2.3 lb. can			
	36354	8 lb. can			
	51608	45 lb. pail			
Marine Grade Anti-Seize	34395	8 oz. brush-top can	2400°F (1315°C)	Black	0.18
	34026	16 oz. brush-top can			
Moly Paste	51050	12 oz. aerosol	750°F (400°C)	Black	0.11
	51048	8 oz. brush-top can			
	51049	1 lb. brush-top can			
	51145	15 lb. can			
Food Grade Anti-Seize	51168	8 oz. brush-top can	750°F (400°C)	White	0.13
	51170	2 lb. can			
	51171	40 lb. pail			
White Hi-Temp Anti-Seize	34517	8 oz. brush-top can	2000°F (1093°C)	White	0.16
	34518	16 oz. brush-top can			
N-1000™ High Purity Anti-Seize	51115	8 oz. brush-top can	1800°F (982°C)	Copper	0.17
	51116	1 lb. can			
	51117	2 lb. can			
N-5000™ High Purity Anti-Seize	51346	1 oz. tube	2400°F (1315°C)	Silver	0.15
	51243	8 oz. brush-top can			
	51269	1 lb. brush-top can			
	51246	2 lb. can			
	51245	8 lb. can			
High Performance N-5000™ High Purity Anti-Seize	51572	1 lb. brush-top can	2400°F (1315°C)	Silver	0.15
N-7000™ High Purity Anti-Seize	51272	8 oz. brush-top can	2400°F (1315°C)	Silver	0.16
	51270	1 lb. brush-top can			
	51273	2 lb. can			

LOCTITE® BRAND ANTI-SEIZE APPLICATION SELECTION GUIDE

PRODUCT	Maximum Anti-Seize Properties	General Purpose Anti-Seize	Extreme High Temperature Resistance (to 2000°F-2400°F)	High Temperature Resistance (to 1600°F-1800°F)	Extreme Chemical Resistance	For Maximum Lubricity	Electrically Conductive	For Aluminum/Soft Metals	For Stainless Steel	Copper-free Formulation	For Low Speeds, High Loads	High Purity	Metal Free	Water Applications
C5-A® Copper Based Anti-Seize Lubricant	●	●		●			●	●	●					
Silver Grade Anti-Seize	●	●		●			●	●	●					
Nickel Anti-Seize	●		●		●		●		●	●				
Moly-50™ Anti-Seize	○					●			●	●	●		●	
Zinc Anti-Seize	○						○	●	●					
Graphite-50™ Anti-Seize	○	○			●		●	●		●			●	
Heavy Duty Anti-Seize	●		●		●		●	●	●	●			●	
Marine Grade Anti-Seize	●		●					●	●	●			●	●
Moly Paste	○					●			●	●	●		●	
Food Grade Anti-Seize	○							●	●	●			●	
White Hi-Temp Anti-Seize	●	●	●					●	●	●			●	
N-1000™ High Purity Anti-Seize	●						●		●			●		
N-5000™ High Purity Anti-Seize	●		●		●		●		●	●		●		
High Performance N-5000™ High Purity Anti-Seize	●		●		●	●	●		●	●		●		
N-7000™ High Purity Anti-Seize	●		●		●		●		●	●		●	●	

● Preferred Choice ● Good Choice ○ Acceptable Choice

