

LOCTITE

Watchmead,
 Welwyn Garden City,
 Herts, AL7 1JB
 Telephone: 01707 358888
 FAX: 01707 358890

Product Description Sheet

8007 8008 C5-A Copper Based Anti-Seize

March 2002

PRODUCT DESCRIPTION

Loctite 8007 8008 is a copper based anti-seize which provides a shield against high temperature seizing and galling. Studs, bolts, flanges, gaskets--all mated parts remove more easily and in cleaner, better condition, in typical dry service temperatures from -29 to +982°C (-20 to +1800°F). Product 8007 8008 can be used on copper, brass, cast iron, steel, all alloys including stainless steel, all plastics and all non-metallic gasketing materials.

Specifications: Tested to MIL A 907

TYPICAL APPLICATIONS

- Original Equipment and Maintenance - bolts, bushings, pipes, fittings, flanges, gaskets, headers, lathe ways, manifolds, nuts, packing, press-fits, plugs, screws, studs, tappings, threaded surfaces, wire rope, adjusting screws, broaching tools, castings, catalytic crackers, condensers, coolers, couplings, cylinders heads, drawing, extruding and forming dies (metals or plastics), drill collars, drive chains, forging dies, friction rings, fuel nozzles, gas burners, handhole studs, heat exchangers, lathe centers, manhole studs, pivots, pumps, rock drills, splines, tool joints, tubing, valve retaining rings, valve shoes and well pumps.
- Petro Chemicals - high temperature compressor heads, threaded connections, pump housings, flanges, studs, stainless steel assemblies, "cat" cracker, heat exchangers, compressor heads, autoclaves.
- Steel Mills - crane assemblies over soak pits, ingot stripper tongs, cooking oven faceplate, manhole studs.
- Power Plants - turbine studs, inlet header assemblies, cylinder head and exhaust manifold studs, steam lines, valves, coal crushers.
- Marine - boiler handhole and manhole cover plate studs, flange bolts on pumps, steam lines, valves.
- Foundries - core molding, shell molding and cast molding equipment, cupola, louvers.

Limitations:

- Contains petroleum--do not use in oxygen service.

PROPERTIES OF MATERIAL

	Typical Value
Appearance	Copper Paste
Solids	40% Copper and Graphite
Specific Gravity	1.2

TYPICAL PERFORMANCE

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:

$$T = K \times F \times D$$

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

K Factor:

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 properties chart for the torque coefficient or K value for the anti-seize compounds. We feel that this data fairly represents performance to be expected. However, Loctite makes no warranty of specific performance on any individual fastener. In critical applications, it is necessary to determine K values independently.

Properties

Properties	Typical Value
Torque coefficient, k (steel nuts & bolts)	.16
Torque coefficient, k (solvent cleaned, not lubricated)	.27

DIRECTIONS FOR USE

- Clean mating surfaces before application
- **Note--when grinding or wire brushing, use dust mask.** Dust from cleaning threads may contain metal compounds. Inhalation may cause lung injury or other harm.
- Apply thin coating to threads and flats or nuts and bolts, assemble.

NOT FOR PRODUCT SPECIFICATIONS.

THE TECHNICAL DATA CONTAINED HEREIN ARE INTENDED AS REFERENCE ONLY.

PLEASE CONTACT LOCTITE CORPORATION QUALITY DEPARTMENT FOR ASSISTANCE AND RECOMMENDATIONS ON SPECIFICATIONS FOR THIS PRODUCT.

ROCKY HILL, CT FAX: +1 (860)-571-5473

DUBLIN, IRELAND FAX: +353-(1)-451 - 9959

A  Company

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

Storage

Product shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8°C to 28°C (46°F to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container. For further specific shelf life information, contact your local Technical Service Center.

Data Ranges

The data contained herein may be reported as a typical value and/or range. Values are based on actual test data and are verified on a periodic basis.

Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Loctite Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Loctite Corporation's products. Loctite Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Loctite Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.