



# LOCTITE<sup>®</sup> Zinc Anti-Seize

February 2007

## PRODUCT DESCRIPTION

LOCTITE<sup>®</sup> Zinc Anti-Seize provides the following product characteristics:

<b>Technology</b>	Zinc Based
<b>Appearance</b>	Dull silver colored smooth paste <sup>LMS</sup>
<b>Cure</b>	Non-curing
<b>Application</b>	Anti-seize

LOCTITE<sup>®</sup> Zinc Anti-Seize is a smooth, homogenous mixture of zinc dust and petrolatum. It prevents seizing during assembly or disassembly of threaded or unthreaded metal joints, particularly if these metal joints involve aluminum or aluminum alloys. LOCTITE<sup>®</sup> Zinc Anti-Seize also provides corrosion protection for both aluminum and ferrous metal components. Within a metal threaded connection, it acts like an "internal galvanize" using the electrochemical properties of zinc dust to protect iron surfaces. Typical applications include aluminum and other soft metal bolts, screws, studs, pipe joints, nuts, and plugs. It is an excellent choice for rust preventative anti-seize applications. This product is typically used in applications with an operating range of -29 °C to +398 °C.

## TYPICAL PROPERTIES

Specific Gravity @ 25 °C	1.36
Weight Per Gallon, lbs/gal	10.8 to 11.8 <sup>LMS</sup>
Penetration, ISO 2137, 1/10mm	160 to 280 <sup>LMS</sup>

## 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, lb.in, lb.ft)

**K** = Torque coefficient or nut factor, determine experimentally

**F** = Clamp load (N, lb.)

**D** = Nominal diameter of bolt (mm, in.)

Torque coefficient, k:

12.7 mm steel bolts (grade 8) and nuts (grade 5)	0.15
12.7 mm steel bolts (grade 8) and nuts (grade 5), solvent cleaned, not lubricated	0.27

## 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).**

## Directions for use

1. For best performance the mating surface should be clean and free of grease
2. Clean parts with a wire brush prior to application of product
3. **Note: When grinding or wire brushing, use a dust mask.** Dust from cleaning threads may contain metal compounds. Inhalation may cause lung injury or other harm
4. Apply thin coating to mating surfaces, assemble
5. Do not use thinner
6. To avoid contamination, keep container closed when not in use

## Loctite Material Specification<sup>LMS</sup>

LMS dated October 19, 2000. Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Quality.

## Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

**Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.**

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

## Conversions

(°C x 1.8) + 32 = °F  
 kV/mm x 25.4 = V/mil  
 mm / 25.4 = inches  
 μm / 25.4 = mil  
 N x 0.225 = lb  
 N/mm x 5.71 = lb/in  
 N/mm<sup>2</sup> x 145 = psi  
 MPa x 145 = psi  
 N·m x 8.851 = lb·in  
 N·m x 0.738 = lb·ft  
 N·mm x 0.142 = oz·in  
 mPa·s = cP

**Note**

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