

LOCTITE[®] Preapplied Anti-Seize ECO

Known as LOCTITE[®] Preapplied Anti-Seize
January 2016

PRODUCT DESCRIPTION

LOCTITE[®] Preapplied Anti-Seize ECO provides the following product characteristics:

Technology	Nickel Based
Chemical Type	Polymeric emulsion
Appearance	Gray paste
Cure	Non-curing
Application	Anti-seize

LOCTITE[®] Preapplied Anti-Seize ECO is a preapplied, high temperature, anti-galling thread lubricant that is dry-to-the-touch. It is pre-coated for production applications such as: exhaust manifold bolts, catalytic converter bolts and oven screws. Maximum service temperature is 650°C (1200F).

TYPICAL PROPERTIES

Specific Gravity @ 25 °C	1.3
Flash Point - See SDS	
Viscosity, Brookfield - HBT, 25 °C, mPa·s (cP):	
Spindle TA, speed 10 rpm	40,000 to 90,000
On Part Life, years	4

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:	
3/8 x 16 steel nuts and bolts	0.09

TYPICAL PERFORMANCE

On - Torque, :		
3/8 x 16 steel nuts and bolts (grade 5):		
After drying minimum of 24 hours @ 22 °C	N·m	≤3.39
	(lb.in.)	(≤30)
After being in a forced air oven for 30 minutes @ 71°C	N·m	≤3.39
	(lb.in.)	(≤30)

Breakaway Torque, :

3/8 x 16 steel nuts and bolts (grade 5):		
After 8 weeks @ 38°C / 100% RH	N·m	5.08
	(lb.in.)	(45)
Salt fog for 8 weeks	N·m	9.6
	(lb.in.)	(85)

Breakloose Torque, :

3/8 x 16 steel nuts and bolts (grade 5):		
After exposure to 650 °C for 24 hours	N·m	22.6
	(lb.in.)	(200)
After 5th exposure	N·m	36.2
	(lb.in.)	(320)

Miscellaneous

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 Safety Data Sheet (SDS).

Directions for use:

LOCTITE[®] Preapplied Anti-Seize ECO is applied to threaded parts by authorized process centers who have automatic fastener cleaning, feeding, coating, rust proofing and drying equipment. Quantities can be handled promptly with minimum turnaround time. Sample fittings should be sent to the nearest authorized process center where they will coat your parts and return them to you for evaluation. **SAMPLE TESTS ARE RECOMMENDED TO OBTAIN DESIRED RESULTS ON YOUR PARTS.** Contact the nearest Loctite Sales Representative for the authorized process center nearest to you.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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Reference 0.2