

LOCTITE[®] Nickel Anti-Seize Lubricant

July 2009

PRODUCT DESCRIPTION

LOCTITE[®] Nickel Anti-Seize Lubricant provides the following product characteristics:

| | |
|-------------------------|---|
| Technology | Nickel Based |
| Chemical Type | Mineral oil, nickel, graphite |
| Appearance | Thick metallic, silver paste, without separation ^{LMS} |
| Viscosity | Flow similar to mustard |
| Cure | Non-curing |
| Application | Anti-seize |
| Specific Benefit | <ul style="list-style-type: none"> Provides long life for slow speed parts Nickel content stays intact up to 1,315°C Prevents galling of parts, especially stainless steel |

LOCTITE[®] Nickel Anti-Seize Lubricant is a heavy-duty, high temperature, anti-seize lubricant that resists galling and corrosion and reduces wear in heavy pressure applications. It contains tenacious metals, oils and graphite materials which cannot be burned away or removed by slow moving parts. It is exceptionally resistant to attack by acids, ammonia, acetylene and vinyl monomer. LOCTITE[®] Nickel Anti-Seize Lubricant reduces friction for tight assembling of stainless steel threads and press fits. It supports five times as much pressure without galling as the leading competitor. Allows easy disassembly of parts after exposure to corrosive or hot environments. Typical applications include lubricating drop forge dies and hammers, catalyst bed and reaction chamber supports, conveyor chains, and chemical plant bolts for pump housings and pipe flanges. It also lubricates and seals pipe threads in acid environments and coats gaskets in high temperature applications. This product is typically used in applications with an operating range of -54 °C to 1,315 °C.

TYPICAL PROPERTIES OF UNCURED MATERIAL

| | |
|---|-------------------------------------|
| Specific Gravity @ 25 °C | 1.1 |
| Salt Fog Corrosion, ASTM B 117, hours | 168 |
| Extreme Pressure Test, ASTM D 2509, m/min | 123 |
| Flash Point - See MSDS | |
| Viscosity, Brookfield - RVT, 25 °C, mPa·s (cP): | |
| Spindle TE, speed 2.5 rpm | 650,000 to 1,050,000 ^{LMS} |

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. Stir LOCTITE[®] Nickel Anti-Seize Lubricant well before using.
2. For best results, remove dirt, oil and grease.
3. Apply a light coating of LOCTITE[®] Nickel Anti-Seize Lubricant to parts requiring protection.
4. Assemble parts.
5. Wipe away excess lubricant, protection of parts is now assured.
6. To prevent contamination of unused product, do not return any material to its original container.
7. **CAUTION:** LOCTITE[®] Nickel Anti-Seize Lubricant is not a high-speed load carrying lubricant and should not be used on ball or roller bearings, or on parts where lubrication is critical.
8. **NOTE:** It is not recommended for high stress grade 8 bolts where stress corrosion may occur.

Loctite Material Specification^{LMS}

LMS dated July 28, 1998. 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

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

Note

The 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, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel 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 Henkel 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.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.3