

LOCTITE[®] 5113

Known as LOCTITE[®] Thread Sealant with PTFE[™]
January 2015

PRODUCT DESCRIPTION

LOCTITE[®] 5113 provides the following product characteristics:

Technology	Solvent based
Chemical Type	Proprietary polymeric material containing dispersed PTFE and isopropyl alcohol
Appearance (uncured)	Off-white, lump-free viscous paste ^{LMS}
Components	One component - requires no mixing
Viscosity	Flow similar to SAE 40 Motor Oil
Cure	Non-curing
Application	Thread sealing

LOCTITE[®] 5113 is a smooth, white paste for general purpose metal pipe sealing. Typical applications include lubricating and sealing threaded pipes, pipe fittings and flanges. Ideal for water pipes. Can be used on lines carrying alkalies (10%), ethylene glycol, petroleum and lubricating oil. This product withstands temperatures ranging from -51 °C to 149 °C.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C 1.12
Flash Point - See SDS

Viscosity, Brookfield - RVT, 25 °C, mPa·s (cP):
Spindle 6, speed 5.0 rpm, 50,000 to 60,000^{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 Safety Data Sheet (SDS).

Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check for compatibility of the washing solution with the adhesive. In some cases these aqueous washes can affect the cure and performance of the adhesive.

Directions for use:

For Assembly

1. For best results, clean all surfaces (external and internal) with a LOCTITE[®] cleaning solvent and allow to dry.
2. Apply a 360° bead of product to the leading threads of the male fitting, leaving the first thread free. Force the

material into the threads to thoroughly fill the voids.

3. Once LOCTITE[®] 5113 is applied, allow a few minutes for solvent to flash off before assembling.
4. Using compliant practices, assemble and wrench tighten fittings in accordance with manufacturers recommendations.
5. Properly tightened fittings will seal instantly to moderate pressures. For maximum pressure resistance and solvent resistance allow the product to cure a minimum of 24 hours.

For Disassembly

1. Remove with standard hand tools.
2. Where hand tools do not work because of excessive engagement length or large diameters (over 1"), apply localized heat to approximately 250 °C. Disassemble while hot.

For Cleanup

1. Cured product can be removed with a combination of soaking in a Loctite solvent and mechanical abrasion such as a wire brush.

Loctite Material Specification^{LMS}

LMS dated May 15, 2003. 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 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 0.3