

LOCTITE[®] 150505 Axle Tube Sealant

Known as LOCTITE[®] Axle Tube Sealant
November 2016

PRODUCT DESCRIPTION

LOCTITE[®] 150505 Axle Tube Sealant provides the following product characteristics:

| | |
|-----------------------------|--|
| Technology | Acrylic |
| Chemical Type | Methacrylate |
| Appearance (uncured) | Opaque, dark red liquid ^{LMS} |
| Fluorescence | Positive under UV light ^{LMS} |
| Components | One component - requires no mixing |
| Cure | Anaerobic |
| Application | Sealing |

LOCTITE[®] 150505 Axle Tube Sealant is an anaerobic dimethylacrylate polyester resin base liquid compound. The liquid polymerizes to form a tough thermoset polymer that permanently seals the pores. The product cures when confined in the absence of air between close fitting metal surfaces and prevents loosening and leakage from shock and vibration. This product may be used on slightly oiled parts and still obtain satisfactory properties. The material is designed specifically for sealing axle tube to casting interface. This product is typically used in applications with an operating range of -55 °C to 150 °C (-65F to 300F).

TYPICAL PROPERTIES OF UNCURED MATERIAL

Flash Point - See SDS

Viscosity, Brookfield - RVF, 25 °C, mPa·s (cP):

| | |
|-------------------------|----------------------------------|
| Spindle 5, speed 2 rpm | 25,000 to 150,000 ^{LMS} |
| Spindle 5, speed 20 rpm | 8,000 to 20,000 ^{LMS} |

TYPICAL PERFORMANCE OF CURED MATERIAL

Adhesive Properties

After 48 hours

@ 22 °C

Compressive Shear Strength, ISO 10123:

| | | |
|------------------------|-------------------|----------------------|
| Steel pins and collars | N/mm ² | ≥15.0 ^{LMS} |
| | (psi) | (≥2,175) |

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:

1. For Assembly

- For best results, clean all surfaces (external and internal) with a LOCTITE[®] cleaning solvent and allow to dry.
- If the material is on an inactive metal or the cure speed is too slow, spray with LOCTITE[®] SF 7471[™] or LOCTITE[®] SF 7649[™] and allow to dry.
- For Slip Fitted Assemblies**, apply adhesive around the leading edge of the pin and the inside of the collar and use a rotating motion during assembly to ensure good coverage.
- For Press Fitted Assemblies**, apply adhesive thoroughly to both bond surfaces and assemble at high press on rates.
- For Shrink Fitted Assemblies** the adhesive should be coated onto the pin, the collar should then be heated to create sufficient clearance for free assembly.
- Parts should not be disturbed until sufficient handling strength is achieved.

2. For Disassembly

- Apply localized heat to the assembly to approximately 250 °C. Disassemble while hot.

3. For Cleanup

- 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 01, 1996. 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 0.4