

LOCTITE[®] EA 3985[™]

August 2020

PRODUCT DESCRIPTION

LOCTITE[®] EA 3985[™] provides the following product characteristics:

Technology	Epoxy
Chemical Type	Epoxy
Appearance	Black paste ^{LMS}
Components	One component - requires no mixing
Cure	Heat cure
Cure Benefit	Production - high speed curing
Application	Bonding

LOCTITE[®] EA 3985[™] is a one component, non-sag, fast cure epoxy adhesive. The product is ideal for bonding wires to armatures due to its rheological properties which prevent flow from the windings but also allow penetration to ensure they are locked in place.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	1.23 to 1.28 ^{LMS}
Gel Time @ 121 °C, minutes: 10 g mass	10
Flash Point - See SDS	
Viscosity, Brookfield - RVT, 25°C, mPa·s (cP): Spindle 7,, speed 20 rpm	40,000 to 50,000 ^{LMS}

TYPICAL CURING PERFORMANCE

Cure Cycle

Normal @ 121 °C, minutes	45
Alternate @ 149 °C, minutes	30

TYPICAL PROPERTIES OF CURED MATERIAL

Electrical Properties:

Volume Resistivity, IEC 60093, Ω·cm	31×10 ¹⁵
Insulation Resistance IEC 60093, Ω	0.25×10 ¹⁵
Dielectric Breakdown Strength, IEC 60243-1, kV/mm	20.9
Dielectric Constant / Dissipation Factor, IEC 60250:	
0.1 kHz	3.6 / 0.003
1 kHz	3.6 / 0.005
10 kHz	3.6 / 0.009
100 kHz	3.5 / 0.013

GENERAL INFORMATION

For safe handling information on this product, consult the Safety Data Sheet (SDS).

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.

Directions For Use:

1. The adhesive should be at room temperature prior to application.
2. Syringes should be allowed to equilibrate to room temperature for 30 to 60 minutes prior to use.

Loctite Material Specification^{LMS}

LMS dated May 16, 2005. 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: 2 °C to 8 °C. Storage below 2 °C or greater than 8 °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. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

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Reference 1.3