

LOCTITE ABLESTIK ME 995-1-4

December 2016

PRODUCT DESCRIPTION

LOCTITE ABLESTIK ME 995-1-4 provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Filler Type	Silica
Cure	Heat cure
Product Benefits	• One component • Thermally conductive • High viscosity • Medium thixotropy
Application	Non-conductive adhesive

LOCTITE ABLESTIK ME 995-1-4 is a thermally conductive glob top for microelectronics applications.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Brookfield Viscosity Sp #7, mPa·s (cP):

Speed 2.5 rpm	335,000
Speed 10 rpm	205,000

Density, g/cm ³	1.5
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Shelf Life (from date of manufacture):

@ 0 to 8°C, days	182
@ 18 to 25°C, days	21
@ 40°C, days	5

Pot Life @ 25°C (time to double viscosity), days	3
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Flash Point - See SDS

TYPICAL CURING PERFORMANCE**Cure Schedule**

60 minutes @ 150°C or
40 minutes @ 170°C or
20 minutes @ 190°C

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL**Physical Properties :**

Hardness, Shore D	85
Coefficient of Linear Thermal Expansion, ppm/°C	45
Glass Transition Temperature (T _g), °C	110
Thermal Conductivity, ASTM D1674, W/(m·K)	0.5

TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength	N/mm ² 13
	(psi) (1,890)

GENERAL INFORMATION

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

THAWING:

1. Allow container to reach room temperature before use.
2. After removing from the freezer, set the syringes to stand vertically while thawing.
3. DO NOT open the container before contents reach 25°C temperature. Any moisture that collects on the thawed container should be removed prior to opening the container.
4. DO NOT re-freeze. Once thawed to 25°C, the adhesive should not be re-frozen.

DIRECTIONS FOR USE

1. Complete cleaning of the components and substrates should be performed to remove contamination such as dust, moisture, salt and oils which can cause electrical failure, poor adhesion or corrosion in an embedded part.
2. Some separation of components is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use.
3. Power mixing is preferred to ensure a homogeneous product.
4. Apply adhesive to all surfaces to be bonded and join together.
5. In most applications only contact pressure is required.

STORAGE:

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage : 0 to 8 °C

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

Reference 1

Disclaimer**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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