

LOCTITE ABLESTIK ME 990

January 2017

PRODUCT DESCRIPTION

LOCTITE ABLESTIK ME 990 provides the following product characteristics:

Technology	Epoxy
Appearance	Beige liquid
Cure	Heat cure
Product Benefits	<ul style="list-style-type: none"> • One component • Oxide filled • Low levels of ionic contaminants
Operating Temperature	-40 to 125°C
Application	Encapsulation
Typical Applications	Encapsulation of motors, coils, transformers and other electrical applications

LOCTITE ABLESTIK ME 990 is designed for die bonding and other assembly applications where electrical conductivity is not required.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield, ASTM D2393, mPa·s (cP):	
Speed 10 rpm	50,000
Density, ASTM-D-792, g/cm ³	1.9
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

1 hour @ 165°C

Final properties, particularly T_g and performance in pressure cooker tests, will depend on die dimension, cure time and temperature. Generally, T_g and other physical properties improve as cure time or temperature is increased.

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 :

Extractable Ionic Content, :	
Chloride (Cl ⁻)	300
Fluorine (F)	50
Sodium (Na ⁺)	50
Potassium (K ⁺)	50

TYPICAL PERFORMANCE OF CURED MATERIAL

Die Shear Strength :

2 X 2 mm (80 x 80 mil) die, Kg 2.5

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.

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

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

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