

LOCTITE ABLESTIK QMI536NB-1A5

August 2015

PRODUCT DESCRIPTION

LOCTITE ABLESTIK QMI536NB-1A5 provides the following product characteristics:

Technology	Bismaleimide Resin
Appearance	beige
Filler Type	PFE
Spacer Size	5 mils
Product Benefits	• Non-conductive • Good dielectric strength • Good die shear strength • Syringe dispensable • 5 mil bondline control • High MSL reliability
Cure	Heat cure
Application	Die attach
Surface Finishes	Bare copper leadframes or other metalized leadframes to bare backed die

LOCTITE ABLESTIK QMI536NB-1A5 non-conductive die attach paste is designed for applications requiring good dielectric strength.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, 5 rpm @ 25°C, cP	9,250
Thixotropic Index (0.5/5 rpm)	5.3
Shelf Life @ -40°C, months	12
Work Life @ 25°C, hours	18
Filler Content, %	41
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Recommended Cure Schedule

30 minute ramp to 175°C + 30 minutes @ 175°C in N₂

The above cure profile is a guideline recommendation. 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

Thermal Conductivity, W/(m-K)	0.3
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Electrical Properties

Dielectric Strength, volts/mil	615
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TYPICAL PERFORMANCE OF CURED MATERIAL

Miscellaneous

Die Shear Strength :	
5 X 5 mm (200 x 200 mil):	
@ 25°C, kg-f/die	15.6
@ 270°C, kg-f/die	0.8

GENERAL INFORMATION

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

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

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. Thawed adhesive should immediately be placed on dispense equipment for use.
2. If the adhesive is transferred to a final dispensing reservoir, care must be exercised to avoid entrapment of contaminants and/or air into the adhesive.
3. Adhesive must be completely used within the product's recommended work life.
4. Apply enough adhesive to achieve a 5 mil wet bondline thickness, dispensed with approximately 25 to 50 % filletting on all sides of the die.
5. Alternate dispense amounts may be used depending on the application requirements.

Storage

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

Optimal Storage : -40 °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

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

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