

LOCTITE ABLESTIK QMI536NB

October 2014

PRODUCT DESCRIPTION

LOCTITE ABLESTIK QMI536NB provides the following product characteristics:

Technology	Bismaleimide Resin
Appearance	white
Cure	Heat cure
Application	Die attach

LOCTITE ABLESTIK QMI536NB is a low bleed non conductive, PTFE-filled paste designed for stacked die applications which require very low stress and robust mechanical properties. The material has the same processing and properties of QMI536 but resin bleed is essentially eliminated. These features produce fast cure capability and enhanced reliability performance to a wide variety of surfaces, including solder resist, flexible tape, bare silicon and various die passivations. A package or device manufactured with this product will have high resistance to delamination and popcorning after multiple exposures to lead-free solder reflow temperatures.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25°C	1.37
Pot Life @ 25 °C, hours	12
Shelf Life @ -40°C (from date of manufacture), days	365
Viscosity @ 25 °C, cps	10,000
Thixotropic Index (Speed 0.5/speed 0.5)	5

TYPICAL CURING PERFORMANCE

Recommended Cure Schedule

30 minutes @ 150°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 :

Coefficient of Linear Thermal Expansion, ppm/°C	
alpha 1	80
alpha 2	150
Glass Transition Temperature (Tg) by TMA, °C	-30
Extractable Ionic Content, ppm:	
Chloride (Cl-)	<20
Sodium (Na+)	<20
Potassium (K+)	<20
Fluoride (F-)	<20
DMA modulus @ 25°C,GPa	0.3
Die Shear (1 mil BLT, 300x300 mil die), @ 25°C >100 on Ceramic, Kg	

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be used with chlorine or other strong oxidizing materials.

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.

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. Storage below minus (-)40 °C or greater than minus (-)40 °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

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

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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Americas
+1.888.943.6535

Europe
+32.1457.5611

Asia
+86.21.3898.4800

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