

## LOCTITE ABLESTIK QMI2419MG

April 2014

#### PRODUCT DESCRIPTION

LOCTITE ABLESTIK QMI2419MG provides the following product characteristics:

Technology	Silver Glass
Appearance	Silver
Filler Type	Silver
Product Benefits	<ul> <li>Excellent hermeticity through the use of lead borate glass</li> <li>Excellent adhesion when processed between 410 to 460</li> </ul>
Cure	Heat cure
Application	Die attach

LOCTITE ABLESTIK QMI2419MG is a silver glass die attach adhesive used for attachment of integrated circuits in glass hermetic packages. The material allows for simultaneous processing of die attach and leadframe embedding, while producing a void-free bondline for maximum thermal dissipation. It offers improved processability by allowing in-line drying during the firing process.

#### TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield , 25 °C, mPa·s (cP):	
Speed 10 rpm	27,000
Thixotropic Index (Speed 1/speed 20)	10.7
Filler Content, by weight in fired film, %	70
Metal to Glass Ratio , by weight in fired film	4:1
Shelf Life @ 25°C , days	365

#### TYPICAL PROPERTIES OF CURED MATERIAL

#### Physical Properties :

Coefficient of Thermal Expansion, TMA, ppn	n/°C:	
Alpha 1		21
Glass Transition Temperature(Tg), °C		300
Extractable Ionic Content, :		
Sodium (Na+)		≤20
Potassium (K+)		≤20
Chloride (Cl-)		≤10
Fluoride (F-)		≤10
Thermal Conductivity, W/(m-K)		>60
DMA Modulus @ 25°C	N/mm² (psi)	15,100 (2.19×10 <sup>+6</sup> )
Package cavity headspace moisture concen Residual Gas Analysis (RGA), ppm	tration,	<1,500

#### TYPICAL PERFORMANCE OF CURED MATERIAL

#### Miscellaneous

Tensile Adhesion @ 25°C:

7.62 x 7.62 mm Si die to Au	plated ceramic, kg-f	36
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#### **GENERAL INFORMATION**

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

#### DIRECTIONS FOR USE

- This material is stored in the manufacturer warehouse at temperatures between 15 to 28°C on jar rollers rotating at 1 to 4 rpm. It is shipped in sealed containers.
- Upon receipt, containers must immediately be placed on jar rollers and continuously rolled for a minimum of 16 hours before opening the jar.

#### 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: 25 °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.

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Reference 0.1