

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	 Excellent hermeticity through the use of lead borate glass Excellent adhesion when processed between 410 to 460
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 ⁺⁶)
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
	platea coranne, ng i	00

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.

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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

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. 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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada, Inc.the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. 0 denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.1