

LOCTITE ABLESTIK GA4

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PRODUCT DESCRIPTION

LOCTITE ABLESTIK GA4 provides the following product characteristics:

Technology	Epoxy
Appearance	blue
Cure	Heat cure
Product Benefits	<ul style="list-style-type: none"> • Non-conductive • Oven Curable • One component • High speed dispensing • High Resistance against solvents
Application	Die attach
Filler Type	Silica

LOCTITE ABLESTIK GA4 adhesive is designed for use in automated assembly operations. In bonding applications where a physical rather than a chemical bond is required, this adhesive successfully bonds semi-porous materials such as ferrites.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Thixotropic Index (0.5/5 rpm)	≥5.0
Viscosity, Brookfield CP51, 25 °C, mPa·s (cP):	
Speed 5 rpm	10,000
Work Life @ 25°C, hour	1
Shelf Life @ -40°C, days	183
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Recommended Curing Conditions

4 hour @ 65°C

Alternative Curing Conditions

1 hour @ 80°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 Thermal Expansion TMA:		
Below Tg, ppm/°C		45
Above Tg, ppm/°C		177
Glass Transition Temperature, °C		
		85
Tensile Modulus, DMTA :		
@ 50 °C	N/mm ² (psi)	2,200 (319,083)
@ 100 °C	N/mm ² (psi)	17 (2,465)
@ 150 °C	N/mm ² (psi)	6.8 (986)
@ 200 °C	N/mm ² (psi)	12 (1,740)
@ 250 °C	N/mm ² (psi)	14 (2,030)

TYPICAL PERFORMANCE OF CURED MATERIAL

Die Shear Strength :

2 X 2 mm (80 x 80 mil) Bare Alloy 42

Cured 1 hour @ 80°C	N/mm ² (psi)	20.7 (3,000)
Cured 1 hour @ 80°C	N/mm ² (psi)	21 (3,000)

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. LOCTITE ABLESTIK GA4 adhesive is designed for stencil/screen printing, pin transfer, dot dispensing or syringe dispensing.
2. Dispense the desired amount of material and place die into deposit using downward force to achieve desired bondline.

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

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

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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