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LOCTITE

Technical Data Sheet

LOCTITE ABLESTIK 8-2

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PRODUCT DESCRIPTION

LOCTITE ABLESTIK 8-2 provides the following product characteristics:

Technology	Epoxy
Appearance	Blue
Product Benefits	• Unfilled • Thermally conductive
Cure	Oven Cure
Application	Die attach

LOCTITE ABLESTIK 8-2 non-conductive die attach adhesive is designed for MEMs package applications. Designed as an instrument adhesive, LOCTITE ABLESTIK 8-2 adhesive offers eight times the thermal conductivity of unfilled epoxies. Bonds made with LOCTITE ABLESTIK 8-2 can withstand continuous exposure @ 150 °C and intermittent exposure @ 200°C.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity, gm/cc	2.3
Work Life @ 25°C, hours	4
Storage Life :	
In kits @ 25ºC, days	365
Premixed & Frozen @ -40ºC, days	365

TYPICAL CURING PERFORMANCE

Cure Schedule

1.5hours @ 95ºC

Alternate Cure Schedule

45 minutes @ 120°C or
4 hours @ 75°C or
24 hours @ 60°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

Hardness, Shore D	90
Glass Transition Temperature (Tg), °C	92
Coefficient of Thermal Expansion , TMA:	
Below Tg, ppm/°C	40
Above Tg, ppm/°C	85
Weight Loss @ 250ºC, TGA, %	0.1
Thermal Conductivity @ 121°C, W/(m-K)	1.5

Electrical Properties

Volume Resistivity , ohms-cm	8×10^{14}
Dielectric Constant / Dissipation Factor@ 1 KHz	5.9 / 0.02
Dielectric Strength, volts/mil	500

TYPICAL PERFORMANCE OF CURED MATERIAL

Miscellaneous

Lap Shear Strength @ 25 °C:		
Al to Al	N/mm²	15
	(psi)	(2,300)
Au to Au	N/mm²	17
	(psi)	(2,600)

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. Apply adhesive as required.
3. Assemble bonds.
4. Cure at one of the recommended cure schedules.

AVAILABILITY

1. LOCTITE ABLESTIK 8-2 adhesive is available in syringes ranging in size from 1 to 30 cc.

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: LOCTITE ABLESTIK 8-2 adhesive packaged in kits may be stored at room temperature (25°C maximum)for up to one (1) year. Premixed and frozen, this adhesive must be contiually stored at -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

(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
N x 0.225 = lb
N/mm x 5.71 = lb/in
psi x 145 = N/mm²
MPa = N/mm²
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

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Disclaimer

Note:
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