

LOCTITE ABLESTIK 84-3GTLTC

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PRODUCT DESCRIPTION

LOCTITE ABLESTIK 84-3GTLTC provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Cure	Heat cure
Product Benefits	- One component - Low temperature cure
Application	Die attach

LOCTITE ABLESTIK 84-3GTLTC is designed for encapsulating die in chip-on-board applications. The lower cure temperature, which reduces thermally induced mechanical stress, is ideal for temperature-sensitive substrates.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield - Cone & Plate, 25 °C, mPa·s (cP)	25,500
Density, gm/cc	1.6
Work Life @ 25 °C, days	14
Shelf Life, :	
@ 5°C, days	91
@ -10°C, days	183
@ -40°C, days	365
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

2 hours @ 85°C

Alternate Cure Schedule

1 hour @ 100°C or

30 minutes @ 120°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	92
Coefficient of Thermal Expansion :	
Below Tg, ppm/°C	45
Above Tg, ppm/°C	15
Glass Transition Temperature, °C	105
Thermal Conductivity @ 121°C, BTU/ft·hr·°F ⁻¹	0.4
Water Extract Conductivity, μmhos/cm	30

Storage Modulus:

@ -65°C	N/mm ² 9,650 (psi) (1400×10 ³)
@ 25°C	N/mm ² 7,580 (psi) (1100×10 ³)
@ 150°C	N/mm ² 1,170 (psi) (170×10 ³)

Weight Loss, %:

@ 250°C	0.34
@ 300°C	0.5

Water Absorption (24 hr immersion), % 0.1

Extractable Ionic Content, ppm:

Chloride (Cl ⁻)	9
Sodium (Na ⁺)	12
Potassium (K ⁺)	5

Electrical Properties

Volume Resistivity, ohms-cm	4×10 ¹⁴
Dielectric Strength, volts/mil	1,000
Dielectric Constant / Dissipation Factor	4.1 / 0.0045

GENERAL INFORMATION

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

AVAILABILITY

- This adhesive is available in a variety of package sizes, ranging from 1 cc 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 : -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

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

Reference 0.0

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