

LOCTITE ABLESTIK 2025JH

November 2016

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 2025JH provides the following product characteristics:

Technology	Proprietary Hybrid Chemistry
Appearance	white
Cure	Heat cure
Product Benefits	<ul style="list-style-type: none"> • Minimum bleed • Good adhesion to a variety of substrates • High hot/wet die shear strength • 260°C reflow capability for Pb-free applications • Non-conductive • Fast cure capability
Application	Die attach
Filler Type	Silica
Typical Package Application	PBGA, FlexBGA and Stacking BGA

LOCTITE ABLESTIK 2025JH die attach adhesive is designed for use in array packaging.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Thixotropic Index (0.5/5 rpm)	4.5
Viscosity, Brookfield CP51, 25 °C, mPa·s (cP):	
Speed 5 rpm	9,500
Work Life @ 25°C, hours	24
Shelf Life @ -40°C (from date of manufacture), days	365

TYPICAL CURING PERFORMANCE Cure Schedule

30 minute ramp to 175°C + 30 minutes @ 175°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 :	
Below Tg, ppm/°C	75
Above Tg, ppm/°C	145

Glass Transition Temperature (Tg) by TMA, °C 18

Tensile Modulus, DMTA :	
@ 25 °C	N/mm ² 280 (psi) (40,610)
@ 150 °C	N/mm ² 50 (psi) (6,820)
@ 200 °C	N/mm ² 70 (psi) (9,720)
@ 250 °C	N/mm ² 120 (psi) (17,400)

Extractable Ionic Content, ppm:	
Chloride (Cl ⁻)	<10
Sodium (Na ⁺)	<10
Potassium (K ⁺)	<10
Weight Loss @ 250°C, %	3.7
Moisture Absorption @ Saturation, wt.% @ 85°C/85%RH	0.23

TYPICAL PERFORMANCE OF CURED MATERIAL

Die Shear Strength :

2 X 2 mm Si die, kg-f,

Substrate	@25°C
Ag/Cu Leadframe	14
BT	12.1

GENERAL INFORMATION

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

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

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

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