

# LOCTITE ABLESTIK BSP 1100

November 2017

## PRODUCT DESCRIPTION

LOCTITE ABLESTIK BSP 1100 provides the following product characteristics:

<b>Technology</b>	Hybrid chemistry
<b>Appearance</b>	Black film
<b>Cure</b>	Heat cure
Product Benefits	<ul style="list-style-type: none"> <li>• Reworkable</li> <li>• Laser Markable</li> <li>• Consistent bondline thickness</li> <li>• Low warpage</li> <li>• MSL 1 reliability</li> <li>• Passed 1000 cycles TC-B; 168 hours PCT</li> </ul>
Carrier Type	PET-base film
Adhesive Film Thickness	100µm
Tight Release Liner Thickness	50µm
Easy Release Liner Thickness	38µm
Total Thickness	188µm plus Adhesive thickness
Wafer Size	8 inch and 12 inch
<b>Application</b>	Controlled Flow Adhesive, Semiconductor, Film
Typical Package Application	WLCSP, backside protection film for laser marking

LOCTITE ABLESTIK BSP 1100 film is designed for WLCSP back side laser marking and chip protection applications. A package using this material will have an overall improvement in package reliability.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Work Life @ 25°C, days	30
Shelf Life @ 5°C (from date of manufacture), days	365
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

### Cure Schedule

30 minute ramp to 150°C + 1 hour @ 150°C

### Alternate Cure Schedule

30 minute ramp to 130°C + 2 hours @ 130°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	<40
Above Tg, ppm/°C	<120
Glass Transition Temperature (Tg) by DMTA, °C	162
Modulus (DMTA):	
@ 25°C	N/mm <sup>2</sup> 8,538 (psi) (1,238,332)
@ 150°C	N/mm <sup>2</sup> 1,857 (psi) (269,335)
@ 250°C	N/mm <sup>2</sup> 165 (psi) (23,931)
Moisture Absorption, %	~1.1 to 1.2

## GENERAL INFORMATION

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

## DIRECTIONS FOR USE

1. Thaw adhesive to room temperature.
2. It is recommended that the film be kept in its original packaging and should be handled with care.
3. Any unnecessary external force to the box or to the film itself such as bending and/or flexing should be avoided.

## 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 : 0 to 5 °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**

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

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