

LOCTITE ABLESTIK BSP 100 SERIES

June 2021

PRODUCT DESCRIPTION

LOCTITE ABLESTIK BSP 100 SERIES provides the following product characteristics:

Technology	Hybrid chemistry
Appearance	Black film
Cure	Heat cure
Product Benefits	<ul style="list-style-type: none"> • Reworkable • Laser Markable • Consistent bondline thickness • Low warpage • MSL 1 reliability • Passed 1000 cycles TC-B; 168 hours PCT
Carrier Type	PET-base film
Adhesive Film Thickness	22µm (ABLESTIK BSP 122) 25µm (ABLESTIK BSP 125) 40µm (ABLESTIK BSP 140) 50µm (ABLESTIK BSP 150)
Tight Release Liner Thickness	50µm
Easy Release Liner Thickness	38µm
Total Thickness	88µm plus Adhesive thickness
Wafer Size	8 inch and 12 inch
Application	Controlled Flow Adhesive
Typical Package Application(s)	WLCSP, backside protection film for laser marking

LOCTITE ABLESTIK BSP 100 SERIES 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	360
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 specific 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 45

Above Tg, ppm/°C 130

Glass Transition Temperature (Tg) by DMTA, °C 162

Modulus (DMTA):

@ 25°C N/mm² 8,101
(psi) (1,174,951)

@ 150°C N/mm² 1,461
(psi) (211,900)

@ 250°C N/mm² 148
(psi) (21,465)

Moisture Absorption, % 1.2

Light Transmittance, % 0.04

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 Henkel Representative

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