Technical Data Sheet

LOCTITE ABLESTIK 8387BSW

August 2012

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 8387BSW provides the following product characteristics:

Technology	Epoxy
Appearance	white
Cure	Heat cure
Product Benefits	• Non-conductive • 30µm polymer spacers for bondline thickness control
Application	Die attach
Typical Applications	Image sensor bonding
Typical Package Application	Camera module

LOCTITE ABLESTIK 8387BSW single component adhesive is designed for high throughput bonding applications. It contains spacers for improved bondline control.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Thixotropic Index (0.5/5 rpm)	6.7
Viscosity, Brookfield CP51, 25 °C, mPa·s (cP):	
Speed 5 rpm	16,980
Work Life @ 25°C, hours	48
Shelf Life @ -40°C (from date of manufacture), days	365

TYPICAL CURING PERFORMANCE

Cure Schedule

1 hour @ 100°C

Alternate Cure Schedule

90 minutes @ 90°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 :

Glass Transition Temperature (Tg) by TMA, °C	100
Coefficient of Thermal Expansion , TMA:	
Below Tg	83
Above Tg	162
Extractable Ionic Content, ppm:	
Chloride (Cl-)	≤50
Sodium (Na+)	≤10
Potassium (K+)	≤10

Tensile Modulus, DMTA :

@ -60 °C	N/mm²	3,818
	(psi)	(553,754)
@ 25 °C	N/mm²	1,927
	(psi)	(279,487)
@ 100 °C	N/mm²	799
	(psi)	(115,885)
@ 150 °C	N/mm²	109
	(psi)	(15,809)
@ 200 °C	N/mm²	102
	(psi)	(14,793)
@ 250 °C	N/mm²	94
	(psi)	(13,633)

TYPICAL PERFORMANCE OF CURED MATERIAL

Die Shear Strength @ 25ºC:

3 X 3 mm (120 x 120 mil) Si die on Ag/Cu LF, kg-f >14

GENERAL INFORMATION

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

THAWING:

1. This adhesive is packed and shipped in dry ice plus barrier packaging to maintain the material temperature between -40 to -20ºC.
2. Allow container to reach room temperature before use.
3. After removing from the freezer, set the syringes to stand vertically while thawing.
4. DO NOT open the container before contents reach 25°C temperature. Any moisture that collects on the thawed container should be removed prior to opening the container.
5. DO NOT re-freeze. Once thawed to -40°C, the adhesive should not be re-frozen.

DIRECTIONS FOR USE

1. Thawed adhesive should immediately be placed on dispense equipment for use.
2. If the adhesive is transferred to a final dispensing reservoir, care must be exercised to avoid entrapment of contaminants and/or air into the adhesive.
3. Adhesive must be completely used within the product's recommended work life.

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. 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
(°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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