

LOCTITE[®] ABLESTIK C 850-5A

August 2021

PRODUCT DESCRIPTION

LOCTITE[®] ABLESTIK C 850-5A provides the following product characteristics:

Technology	Epoxy
Appearance	Silver
Filler Type	Silver
Product Benefits	<ul style="list-style-type: none"> • Fast cure • One component • Electrically conductive • Good green strength • No resin bleed • Easily applied by dispensing or stencil printing
Cure	Heat cure
Components	One
Application	Electrically Conductive Adhesive
Operating Temperature	-40 to 125°C
Typical Package Application(s)	LED die bonding

LOCTITE[®] ABLESTIK C 850-5A electrically conductive adhesive is designed for LED die bonding and other die attach applications

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield, mPa·s (cP):	
Speed 5 rpm, #TC	215,000
Density, g/cm ³	3.2
Shelf Life @ -20°C, days	180
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

- 1 minute @ 250°C or
- 30 minutes @ 150°C or
- 1 hour @ 125°C

For optimum performance, follow the initial cure with a post cure of 1 to 2 hours at maximum expected operating temperature.

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

Electrical Properties

Volume Resistivity @ 25°C, ohm-cm	0.001
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TYPICAL PERFORMANCE OF CURED MATERIAL

Miscellaneous

Die Shear Strength: 1.2 X 1.3 mm (47 x 50 mil) die, Kg	1.4
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GENERAL INFORMATION

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

Directions for Use

1. Complete cleaning of the substrates should be performed to remove contamination such as oxide layers, dust, moisture, salt and oils which can cause poor adhesion or corrosion in a bonded part.
2. Some filler settling is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use. Power mixing is preferred to ensure a homogeneous product.
3. Apply adhesive to all surfaces to be bonded and join together.
4. In most applications only contact pressure is required.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: -20°C. Storage below -20°C or above -20°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 Henkel Representative.

Conversions

$$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$$

$$\text{kV/mm} \times 25.4 = \text{V/mil}$$

$$\text{mm} / 25.4 = \text{inches}$$

$$\text{N} \times 0.225 = \text{lb/F}$$

$$\text{N/mm} \times 5.71 = \text{lb/in}$$

$$\text{psi} \times 145 = \text{N/mm}^2$$

$$\text{MPa} = \text{N/mm}^2$$

$$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$$

$$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$$

$$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$$

$$\text{mPa}\cdot\text{s} = \text{cP}$$

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local Henkel representative for assistance and recommendations on the specifications of this product.

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Reference 0.2