

# LOCTITE ABLESTIK C850-6

October 2020

## PRODUCT DESCRIPTION

LOCTITE ABLESTIK C850-6 provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Silver
<b>Filler Type</b>	Silver
<b>Product Benefits</b>	<ul style="list-style-type: none"><li>• Electrically conductive</li><li>• Low viscosity</li><li>• Fast cure</li><li>• High strength at wire bond temperatures</li><li>• Reduced tailing and stringing</li></ul>
<b>Cure</b>	Heat cure
<b>Components</b>	One
<b>Application</b>	Die attach
<b>Operating Temperature</b>	-40 to 125°C

LOCTITE ABLESTIK C850-6 die attach epoxy adhesive was designed for bonding most plastic packaged ICs and other die attach applications.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield, mPa·s (cP):	
Speed 5 rpm, #TC	100,000
Density, g/cm <sup>3</sup>	3.2
Shelf Life @ -20 to 0°C, days	180
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE Cure Schedule

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

## Post Cure

1 to 2 hours at the highest expected use 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, ohm-cm @ 25°C ≤0.001

## TYPICAL PERFORMANCE OF CURED MATERIAL

Die Shear Strength :

47 x 50 mil die, kg ≥1.6

## GENERAL INFORMATION

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

## 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.

## 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 to 0 °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.

## 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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## Reference 0.3