

LOCTITE ABLESTIK C 860-4 309

October 2014

PRODUCT DESCRIPTION

LOCTITE ABLESTIK C 860-4 309 provides the following product characteristics:

Technology	Epoxy
Appearance	Silver paste
Components	One-component
Product Benefits	<ul style="list-style-type: none"> Electrically conductive B-Stageable Low levels of extractable ionic contaminants High glass transition
Filler Type	Silver
Cure	Heat Cure
Application	Assembly

LOCTITE ABLESTIK C 860-4 309 silver filled epoxy adhesive is designed for high throughput assembly operations.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Brookfield Viscosity # TC, mPa·s (cP):

Speed 5 rpm	60,000
Density, ASTM D792, g/cm ³	2.9
Shelf Life @ 0°C, days	182
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Recommended B-Stage Condition

- 5 to 10 minutes @ 100°C or
- 2 to 5 minutes @ 140°C

Recommended Cure Schedule

- 1 hour @ 200°C or
- 5 to 10 seconds @ 300°C (on wire bonding stage)

For optimum performance, follow the initial cure with a post cure of 3 hours at 180 °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

Extractable Ionic Content, ppm:

Chloride (Cl ⁻)	<20
Sodium (Na ⁺)	<10
Potassium (K ⁺)	<10
Ammonia (NH ₄ ⁺)	<10

Electrical Properties

Volume Resistivity @ 25°C, ohm-cm	0.0005
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TYPICAL PERFORMANCE OF CURED MATERIAL

Die Shear Strength :

50 x 47 mil die, Kg:

Cured 1 hour @ 200°C

1.4

GENERAL INFORMATION

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

DIRECTIONS FOR USE

- 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.
- 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.
- Apply adhesive to all surfaces to be bonded and join together.
- 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 : 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 Technical Service Center or Customer Service Representative.

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.

Conversions

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

Disclaimer

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and

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