

LOCTITE ABLESTIK CE 8500

August 2012

PRODUCT DESCRIPTION

LOCTITE ABLESTIK CE 8500 provides the following product characteristics:

Technology	Modified epoxy
Appearance	Silver
Cure	Heat cure
Product Benefits	<ul style="list-style-type: none"> Electrically conductive One component Low stress Flexible for Bonding Mismatched Adherends
Filler Type	Silver
Filler Weight, %	73 to 75
Application	Electrically Conductive Adhesive
Operating Temperature	-45 to 200 °C
Typical Package Application	Substrate attach, Heat sink attach and Sensor attach

LOCTITE ABLESTIK CE 8500 is a solventless epoxy adhesive that combines low stress with good adhesion on nearly all surfaces.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield, 25 °C, mPa·s (cP):	
Speed 10 rpm, #TD	120,000 to 140,000
Specific Gravity	3.1 to 3.14
Shelf Life @ -25 to -18°C, days	122

Flash Point - See SDS

TYPICAL CURING PERFORMANCE

Cure Schedule

90 minutes @ 120°C or
40 minutes @ 150°C or
15 minutes @ 175°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 :

Coefficient of Thermal Expansion ppm/°C	55
Glass Transition Temperature (Tg) by TMA, °C	24
Thermal Conductivity, W/(m-K)	4
Elongation ASTM D 4112,%	10
Extractable Ionic Content, ppm:	
Chloride (Cl-)	150
Sodium (Na+)	10
Potassium (K+)	10
Ammonia (NH4+)	10
Moisture Absorption, %:	
24 hour Boil Test	1.5

Electrical Properties:

Volume Resistivity, ohms-cm	0.0002
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TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength, MPa	2.5
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GENERAL INFORMATION

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

DIRECTIONS FOR USE

- The surfaces on which the adhesive has to be applied should be clean, dry and free from all dust

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: -18 °C to -25°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.

Conversions

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

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 working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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