

# LOCTITE ABLESTIK C 805-1

December 2016

## PRODUCT DESCRIPTION

LOCTITE ABLESTIK C 805-1 provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Silver
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• One component</li> <li>• Electrically conductive</li> <li>• Thermally conductive</li> <li>• Thixotropic</li> <li>• Bond strength</li> <li>• Good adhesion to a variety of substrates</li> <li>• Long room temperature stability</li> <li>• Process ease</li> <li>• Good green strength</li> <li>• No bleed</li> <li>• Corrosion resistant</li> </ul>
<b>Cure</b>	Heat cure
<b>Application</b>	Conductive adhesive, Assembly
<b>Typical Package Application</b>	LED crystal bonding and Chip-on-board
<b>Operating Temperature</b>	-45 to 150 °C

LOCTITE ABLESTIK C 805-1 is the lower viscosity version of ECCOBOND C 805.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield @ 25 °C, mPa·s (cP)	130,000
Density, g/cm <sup>3</sup>	3.32
Shelf Life @ -25 to -18°C, days	365
Pot Life, days:	
syringes:	
@ 18 to 25 °C	1 to 1.5
@ 40 °C	<1
jars:	
@ 18 to 25 °C	28
@ 40 °C	4

Flash Point - See SDS

## TYPICAL CURING PERFORMANCE Cure Schedule

120 minutes @ 125°C  
 60 minutes @ 150°C  
 30 minutes @ 180°C  
 10 minutes @ 200°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

Thermal Conductivity, W/(m·K)	2.5
Glass Transition Temperature, °C	108
Coefficient of Thermal Expansion, ppm/°C	66

### Electrical Properties

Volume Resistivity, ohms-cm	8×10 <sup>-4</sup>
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## TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength	N/mm <sup>2</sup> 9 (psi) (1,310)
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## GENERAL INFORMATION

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

## DIRECTIONS FOR USE

1. Some separation of components is common during shipping and storage. If separation occurs, stir gently until uniform, being careful not to entrap air
2. 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
3. Apply adhesive to all surfaces to be bonded and join together
4. In most applications only contact pressure is required

## 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 : -25 to -18 °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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