

# LOCTITE ABLESTIK CE 3103WLV

March 2019

## PRODUCT DESCRIPTION

LOCTITE ABLESTIK CE 3103WLV provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Silver
<b>Cure</b>	Heat cure
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>Electrically conductive</li> <li>Pb-free alternative to solder</li> <li>Low cure temperature</li> <li>Passes NASA outgassing</li> </ul>
<b>Filler Type</b>	Silver
<b>Filler Weight, %</b>	76
<b>Application</b>	Electrically Conductive Adhesive
<b>Surfaces</b>	Sn, Sn/Pb and OSP coated Cu
<b>Typical Package Application</b>	SMD component attach

LOCTITE ABLESTIK CE 3103WLV is an electrically conductive epoxy adhesive that is a Pb-free alternative to solder.

LOCTITE ABLESTIK CE 3103WLV passes NASA outgassing standards.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity at 25°C, mPa·s (cP) (Plate 2 cm at 15 s <sup>-1</sup> )	20,000
Thixotropic Index	5.5
Pot Life @ 25°C, days	3
Shelf Life @ -40°C, days	365
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE Cure Schedule

10 minutes @ 120°C or  
3 minutes @ 150°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:	
Below Tg	45
Above Tg	225
Glass Transition Temperature (Tg) by TMA, °C	114
Modulus @ 25°C, GPa	4.5
Operating temperature, °C	150

### Electrical Properties:

Volume Resistivity, ohms-cm	0.0008
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## TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength, MPa	13
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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: -40 to -35°C. Storage below -40°C can adversely affect product properties (freeze-thaw voids).**

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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Reference 2

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