

# LOCTITE ABLESTIK TE 3530

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## PRODUCT DESCRIPTION

LOCTITE ABLESTIK TE 3530 provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	White
<b>Cure</b>	Heat cure
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• One component</li> <li>• Thermally conductive</li> <li>• Low viscosity</li> <li>• Low temperature cure</li> </ul>
<b>Application</b>	Assembly
<b>Typical Package Application</b>	Sensor attach and Die attach
<b>Operating Temperature</b>	150 °C

LOCTITE ABLESTIK TE 3530 adhesive is designed for bonding heat dissipation components and can be applied by automatic syringe dispense. It cures at moderate to low temperatures allowing it to be used on heat sensitive materials.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity @ 25 °C, mPa·s (cP):	
@ 10 s <sup>-1</sup>	60,000
Specific Gravity	2.7
Hegman Fineness, micron	40
Shelf Life:	
@ -25 to -18°C, days	182
@ 18 to 25°C, days	3
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

### Cure Schedule

30 minutes @ 100°C or
15 minutes @ 120°C or
10 minutes @ 150°C

Cure can be accelerated by using IR cure instead of convection oven cure.

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, K <sup>-1</sup>	36×10 <sup>-6</sup>
Glass Transition Temperature (T <sub>g</sub> ), DMA, °C	55
Thermal Conductivity, W/(m·K)	2.3

Young's Modulus, psi, maximum:

@ -40 °C	2,900,000
@ -20 °C	2,320,000
@ 0 °C	1,450,000
@ 25 °C	681,500
@ 50 °C	217,500
@ 100 °C	43,500
@ 150 °C	29,000
@ 200 °C	26,100
Hardness, Shore D	87

## Electrical Properties

Volume Resistivity, ohms-cm	1×10 <sup>15</sup>
Surface Resistivity, ohms	1×10 <sup>14</sup>

## TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength:	
On Al, MPa	>8

## GENERAL INFORMATION

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

### THAWING:

1. Allow container to reach room temperature before use.
2. After removing from the freezer, set the syringes to stand vertically while thawing.

### 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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$

$\text{kV/mm} \times 25.4 = \text{V/mil}$

$\text{mm} / 25.4 = \text{inches}$

$\text{N} \times 0.225 = \text{lb}$

$\text{N/mm} \times 5.71 = \text{lb/in}$

$\text{N/mm}^2 \times 145 = \text{psi}$

$\text{MPa} = \text{N/mm}^2$

$\text{MPa} \times 145 = \text{psi}$

$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$

$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$

$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$

$\text{mPa}\cdot\text{s} = \text{cP}$

## 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 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 0.4