

# LOCTITE ABLESTIK 144A

December 2016

## PRODUCT DESCRIPTION

LOCTITE ABLESTIK 144A provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Black
<b>Cure</b>	Heat cure
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• One component</li> <li>• Rapid cure at elevated temperatures</li> <li>• High operating temperature</li> <li>• Solvent-free</li> </ul>
<b>Application</b>	Assembly
<b>Operating Temperature</b>	-62 to 200 °C

LOCTITE ABLESTIK 144A liquid epoxy is suitable for use on a wide variety of substrates. This material does not contain any solvents and eliminates the need for additional catalysts.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity @ 25 °C, mPa·s (cP):	
Spindle 7., speed 20 rpm	93,000
Density, g/cm <sup>3</sup>	1.55
Shelf Life:	
@ 0 to 8°C, days	183
@ 18 to 25°C, days	91
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

### Gel Time

- 10 minutes @ 120°C or
- 2 minutes @ 150°C or
- 30 seconds @ 180°C

### Cure Schedule

- 4 hours @ 80°C or
- 1 hour @ 120°C or
- 30 minutes @ 150°C or
- 8 minutes @ 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

Hardness, Shore D	90
Coefficient of Linear Thermal Expansion, 10 <sup>-6</sup> K <sup>-1</sup>	48
Glass Transition Temperature, °C	107
Thermal Conductivity, W/(m·K)	0.63
Stroke Cure @ 160°C, seconds	60
Water Absorption, after 24 hours @ RT, %	0.07

## Electrical Properties

Volume Resistivity @ 25°C, ohm-cm	1×10 <sup>14</sup>
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## TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength :		
@ 25°C	N/mm <sup>2</sup>	15
	(psi)	(2,175)

## GENERAL INFORMATION

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

## DIRECTIONS FOR USE

1. Carefully clean and dry all surfaces to be bonded.
2. Apply adhesive to surface to be bonded.
3. Cure at recommended cure schedules.

## 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: 0 to 8°C or 18 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

(°C x 1.8) + 32 = °F  
 kV/mm x 25.4 = V/mil  
 mm / 25.4 = inches  
 N x 0.225 = lb  
 N/mm x 5.71 = lb/in  
 psi x 145 = N/mm<sup>2</sup>  
 MPa = N/mm<sup>2</sup>  
 N·m x 8.851 = lb·in  
 N·m x 0.738 = lb·ft  
 N·mm x 0.142 = oz·in  
 mPa·s = 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,

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Reference 1