

## **LOCTITE ABLESTIK 144A P2**

December 2016

#### PRODUCT DESCRIPTION

LOCTITE ABLESTIK 144A P2 provides the following product characteristics:

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Technology	Epoxy Black paste			
Appearance				
Cure	Heat cure			
Product Benefits	One component			
	<ul> <li>Good adhesion strength</li> </ul>			
	High viscosity			
	Low sag			
	<ul> <li>Good chemical resistance</li> </ul>			
	<ul> <li>Good thermal resistance</li> </ul>			
Application	Non-conductive adhesive			
Operating Temperature	-60 to 200 °C			
Surfaces	Metals, Glass and Plastics			

LOCTITE ABLESTIK 144A P2 adhesive is designed for use in automated assembly and in-line curing operations.

#### TYPICAL PROPERTIES OF UNCURED MATERIAL

Density, g/cm³	1.55
Viscosity @ 25 °C, mPa·s (cP)	120,000
Sag Test, %	<50
Work Life @ 25°C, days	3
Shelf Life (from date of manufacture):	
@ -25 to -18°C, days	183
@ 18 to 25°C, days	3
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Flash Point - See SDS

### TYPICAL CURING PERFORMANCE

#### **Cure Schedule**

8 minutes @ 180°C 30 minutes @ 150°C

1 hour @ 120°C

4 hours @ 80°C

For optimum performance at temperature above 2 to 4°C, a post cure of hours at °C is recommended.

This product may generate excessive heat if cured in thicknesses greater than 6 mm (0.236 inch) at a temperature above 120°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**

Electrical Properties					
	Hardness, Shore D	90			
	Glass Transition Temperature (Tg), °C	110			
	Coefficient of Linear Thermal Expansion, ppm/°C	40			

Volume Resistivity, ohm-cm @ 25°C 1×10<sup>14</sup>

#### TYPICAL PERFORMANCE OF CURED MATERIAL **Shear Strength**

Tensile Lap Shear Strength:

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	Tested @ 25 °C	N/mm² (psi)	17 (2,470)
	Tested @ 100 °C	N/mm² (psi)	15 (2,180)
	Tested @ 150 °C	N/mm² (psi)	8 (1,160)
	Tested @ 200 °C	N/mm² (psi)	3 (435)

#### **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. Some separation of components is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use

#### 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.

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

(°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/mm² MPa = N/mm² N·m x 8.851 = lb·ft N·mm 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, 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 1