

# LOCTITE D 124 F

November 2015

## PRODUCT DESCRIPTION

LOCTITE D 124 F provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Yellow paste
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• High dot profile</li> <li>• No stringing</li> <li>• High hot strength</li> <li>• One component</li> <li>• Low temperature cure</li> <li>• Low shrinkage during cure</li> <li>• Low CTE</li> <li>• Minimal stress on bonded components</li> </ul>
<b>Cure</b>	Heat cure
<b>Application</b>	Surface Mounted Devices
<b>Typical Assembly Applications</b>	Bonding a complete range of components, including chip capacitors and resistors, SOT's, SOIC's and PLCC's

LOCTITE D 124 F surface mount adhesive is designed for use in high-speed pneumatic and positive displacement dispensers. This one component adhesive is formulated to prevent component movement during board handling and cure.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Density, g/cm <sup>3</sup>	1.2
Calculated Yield (Casson), N/m <sup>2</sup>	95
Fineness, µm	<50
Shelf Life (from date of manufacture), days:	
0 to 8 °C	180
18 to 25 °C.	60
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

### Cure Schedule

IR or Convection Conveyor Oven

- 20 minutes @ 100°C
- 10 minutes @ 110°C
- 3.5 minutes @ 120°C

Convection Box Oven

- 30 minutes @ 100°C
- 15 minutes @ 110°C
- 10 minutes @ 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

Degree of Conversion, %	>90
Linear Shrinkage on Cure, %	0.5
Hardness, Shore D	>85
Coefficient of Thermal Expansion, ppm/°C	58
Glass Transition Temperature, °C	85
Thermal Conductivity, W/(m-K)	0.3

### Electrical Properties

Dielectric Constant	3.5
Volume Resistivity, ohm-cm	>1×10 <sup>14</sup>
Electromigration (Bellcore)	Pass

## TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength	N/mm <sup>2</sup>	6
	(psi)	(870)

## GENERAL INFORMATION

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

## DIRECTIONS FOR USE

1. Allow material to reach room temperature prior to opening the container and before 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.

### 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 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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$   
 $\text{kV/mm} \times 25.4 = \text{V/mil}$   
 $\text{mm} / 25.4 = \text{inches}$   
 $\text{N} \times 0.225 = \text{lb}$   
 $\text{N/mm} \times 5.71 = \text{lb/in}$   
 $\text{psi} \times 145 = \text{N/mm}^2$   
 $\text{MPa} = \text{N/mm}^2$   
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$   
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$   
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$   
 $\text{mPa}\cdot\text{s} = \text{cP}$

## 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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