

LOCTITE D 125 F 3

November 2014

PRODUCT DESCRIPTION

LOCTITE D 125 F 3 provides the following product characteristics:

Technology	Epoxy
Appearance	Yellow
Components	One-component
Product Benefits	<ul style="list-style-type: none"> • Low exotherm • Low water absorption • No stringing • High hot strength • High green strength
Cure	Heat Cure
Application	Surface mount adhesive
Operating Temperature	120 °C
Typical Assembly Applications	Chip capacitors, Chip resistors, SOTs, SOICs and PLCCs

LOCTITE D 125 F 3 surface mount adhesive is designed for high speed dispensing. This material is formulated to dispense easily without stringing and not sag during cure. It is specifically designed for use on high speed pneumatic and positive displacement dispensers.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Fineness, μm	<50
Density, g/cm^3	1.35
Plastic Viscosity (Casson) Cone & Plate, $\text{mPa}\cdot\text{s}$ (cP)	38,000
Calculated Yield (Casson), N/m^2	260
Shelf Life:	
@ 0 to 8°C, days	183
@ 18 to 25°C, days	61
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE
IR or Convection Conveyor Oven

20 minutes @ 100°C or
7 minutes @ 110°C or
2.5 minutes @ 120°C

Convection Box Oven

30 minutes @ 100°C or
20 minutes @ 110°C or
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

Hardness, Shore D	>80
Coefficient of Thermal Expansion, $\text{ppm}/^\circ\text{C}$	75

Glass Transition Temperature, °C	72
Thermal Conductivity, $\text{W}/(\text{m}\cdot\text{K})$	0.3
Degree of Conversion @ 25°C, after 3 minutes, %	>90
Linear Shrinkage on Cure, %	0.5

Electrical Properties

Dielectric Constant	3.5
Volume Resistivity, $\text{ohm}\cdot\text{cm}$	$>1 \times 10^{14}$
Electromigration (Bellcore)	Pass

TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength	N/mm^2 >8	(psi) (1,160)
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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, normally 8 to 12 hours.

DIRECTIONS FOR USE

1. Complete cleaning of the substrates or other objects to be coated should be cleaned in accordance with accepted industry practices. CLEANER 50306 have been found satisfactory as cleaning agents.
2. Use of alcohol for cleaning is not recommended.

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

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

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.

Conversions

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

Reference 0.0

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