

LOCTITE D 125 F

September 2014

PRODUCT DESCRIPTION

LOCTITE D 125 F 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 speed dispensing • Low cure temperature • Non-sag
Cure	Heat Cure
Application	Surface mount adhesive
Operating Temperature	-40 to 105 °C
Typical Assembly Applications	Chip capacitors, Chip resistors, SOTs, SOICs and PLCCs

LOCTITE D 125 F surface mount adhesive is designed for high speed dispensing.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield , 25 °C, mPa·s (cP):	
Speed 1 rpm, #TD	1,750,000
Speed 10 rpm, #TD	350,000
Calculated Yield (Bingham), mPa·s (cP)	350,000
Specific Gravity	1.275
Hegman Fineness, μm	<50
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 or
- 1.5 minutes @ 150°C

Convection Box Oven

- 30 minutes @ 100°C or
- 20 minutes @ 110°C or
- 10 minutes @ 120°C or
- 5 minutes @ 150°C

Note: A ramp up temperature of not more than 1°C per second should be used.

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 ASTM D 3386: Below Tg, ppm/°C	58
Glass Transition Temperature, ISO 11357-2, °C	85
Coefficient of Thermal Conductivity, W/(m-K)	0.3
Shore Hardness, ISO 868, Durometer D	>80
Linear Shrinkage, %	0.5
Degree of Conversion by DSC , %: 3 minutes @ 125°C	>90

Electrical Properties:

Dielectric Constant , IEC 60250 @ 1 MHz	3.5
Volume Resistivity, IEC 60093, Ω·cm	1×10 ¹⁴

TYPICAL PERFORMANCE OF CURED MATERIAL

Lap Shear Strength , ISO 4587:	
Aluminum @ 25 °C	N/mm ² >8 (psi) (>1,160)

GENERAL INFORMATION

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

THAWING:

1. Allow material to reach room temperature before use.

DIRECTIONS FOR USE

1. LOCTITE D 125 F can be applied by dispensing, pin transfer, screen or stencil printing.
2. Equipment set-up and related product information is available from your Henkel Corporation support group.

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

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

Disclaimer

Note:

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Reference 0.3