

LOCTITE D 125 F 5

June 2020

PRODUCT DESCRIPTION

LOCTITE D 125 F 5 provides the following product characteristics:

Technology	Epoxy
Appearance	Yellow
Components	One part - requires no mixing
Product Benefits	<ul style="list-style-type: none"> • Low exotherm • Low water absorption • High hot strength • High green strength • No sag during cure • No moisture absorption when uncured • No corrosion after cure • Low temperature cure
Cure	Heat cure
Application	Electronic Material, Component assembly
Operating Temperature	120 °C
Typical Assembly Applications	SOICs and PLCCs

LOCTITE D 125 F 5 surface mount adhesive is designed for use in high-speed pneumatic and positive displacement dispensers.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Calculated Yield (Bingham), N/m ²	700
Density, g/cm ³	1.4
Fineness, µm	<50
Storage Life (from date of manufacture):	
@ 0 to 8°C, days	180
@ 18 to 25°C, days	60
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

LOCTITE D 125 F 5 can be cured using infrared systems or convection oven.

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, 10 ⁻⁶ K ⁻¹	58
Glass Transition Temperature, °C	73
Degree of Conversion @ 125°C, %	>90
Linear Shrinkage on Cure, %	0.5
Hardness, Shore D	>80
Thermal Conductivity, W/(m-K)	0.3

Electrical Properties

Volume Resistivity, ohm-cm	>1×10 ¹⁴
Dielectric Constant	3.5

TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength	N/mm ² >6	(psi) (>870)
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GENERAL INFORMATION

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

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.

DIRECTIONS FOR USE

1. Store in a cool, clean and dry area.
2. Usable shelf life may vary depending on method of application and storage conditions.
3. LOCTITE D 125 F 5 stored at low temperatures must be allowed to return to room temperature before use. This normally takes 8 to 12 hours.
4. For board and equipment cleaning we advise the use of LOCTITE STYCAST CLEANER 50306.
5. 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 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

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

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