Hysol

ECCOBOND D125F-DR

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PRODUCT DESCRIPTION

ECCOBOND D125F-DR provides the following product characteristics:

Technology	Epoxy
Appearance	Dark red
Components	One-component
Product Benefits	• No stringing • Low water absorption • High hot strength • High speed dispensing • High yield • No sag during cure
Cure	Heat Cure
Application	Surface mount adhesive
Operating Temperature	-40 to 105 °C
Typical Assembly Applications	Chip capacitors, Chip resistors, SOTs, SOICs and PLCCs

ECCOBOND D125F-DR 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. ECCOBOND D125F-DR is the red colored version of ECCOBOND D125F.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield , ASTM D2393, mPa·s (cP):	
Speed 1 rpm	1,750,000
Speed 10 rpm	350,000
Plastic Viscosity (Casson) Cone & Plate, mPa·s (cP)	2,700
Calculated Yield (Casson) Cone & Plate, N/m²	270
Density, ASTM D792, g/cm³	1.275
Hegman Fineness, µm	<50
Shelf Life @ 4°C (from date of manufacture), months	3

Flash Point - See MSDS

TYPICAL CURING PERFORMANCE

IR or Convection Conveyor Oven

20 minutes @ 100°C or
2.5 minutes @ 120°C or
1.5 minutes @ 150°C

Convection Box Oven

30 minutes @ 100°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:

Hardness, Shore D, ASTM D2240	>80
Glass Transition Temperature, ASTM D3418, °C	85
Coefficient of Thermal Expansion , ASTM D3386:	
Below Tg, 10^{-6}/ºC	58
Degree of Conversion by DSC @ 25 °C, %	>90
Linear Shrinkage on Cure, ASTM D2566, %	0.5
Thermal Conductivity, ASTM D-2214, W/(m-K)	0.3

Electrical Properties:

Dielectric Constant @ 1 MHz, ASTM D150	3.5
Volume Resistivity@ 25ºC, ASTM D257, ohm-cm	$>1\times10^{14}$

TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength , ASTM D1002:		
Aluminum to aluminum @ 25 °C	N/mm²	>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. ECCOBOND D125F-DR is best suited for dispensing, pin transfer or stencil printing application method.
2. Equipment set-up and related product information is available from your Henkel Corporation support group.

Henkel

Storage
Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage : 4 °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
(°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
N/mm^2 x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Note
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Reference N/A