

# ECCOBOND E3526-5

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## PRODUCT DESCRIPTION

ECCOBOND E3526-5 provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Dark grey paste
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• One component</li> <li>• Bonds to a wide variety of substrates</li> <li>• Reduced thermal expansion</li> <li>• No cracking during thermoshocks</li> <li>• Solvent-free</li> </ul>
<b>Cure</b>	Heat cure
<b>Application</b>	Assembly

ECCOBOND E3526-5 is specially developed for ferrite core bonding applications. It is formulated to have high bond strength when cured at temperatures as low as 100 to 120°C. When used as a potting compound, it is recommended not to exceed a volume of 30 cc to avoid exothermic reaction. ECCOBOND E3526-5 adhesive is the better flowing version of ECCOBOND E3526 adhesive.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield, mPa·s (cP):	
Spindle 5, speed 5 rpm	25,000
Viscosity @ 10 s <sup>-1</sup> , Rheometer D, mPa·s (cP)	10,000
Density, g/cm <sup>3</sup>	1.45
Shelf Life:	
@ 0 to 8°C, months	6
@ 25°C, week	1
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

### Cure Schedule

- 20 minutes gel, 60minutes @ 100°C
- 5 minutes gel, 20minutes @ 120°C
- 2 minutes gel, 10minutes @ 150°C

Properties of the cured material will depend upon the cure schedule used.

Avoid exothermal behavior, carefully check if thick sections (>2 cm) and large masses (>30 grams) need to be cured.

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	85
Coefficient of Linear Thermal Expansion, 10 <sup>-6</sup> K <sup>-1</sup> :	
Below Tg	60
Above Tg	160
Glass Transition Temperature, °C:	
(Tg) by DMA	145
(Tg) by TMA	120
Young's Modulus:	
@ 50°C	N/mm <sup>2</sup> 1,132 (psi) (164,182)
@ 100°C	N/mm <sup>2</sup> 947 (psi) (137,350)
@ 150°C	N/mm <sup>2</sup> 94 (psi) (13,633)
@ 200°C	N/mm <sup>2</sup> 33 (psi) (4,786)

### Electrical Properties:

Volume Resistivity, ohms-cm	>1×10 <sup>-14</sup>
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## TYPICAL PERFORMANCE OF CURED MATERIAL

### Tensile Lap Shear Strength:

Aluminum to Aluminum:	
@ 25°C	N/mm <sup>2</sup> 9.5 (psi) (1,380)
@ 125°C	N/mm <sup>2</sup> 8.0 (psi) (1,145)
@ 150°C	N/mm <sup>2</sup> 5.0 (psi) (710)
@ 180°C	N/mm <sup>2</sup> 3.5 (psi) (490)
Polybutylene terephthalate (PBT) to Polybutylene terephthalate (PBT):	
@ 25°C	N/mm <sup>2</sup> 3.5 (psi) (510)
@ 125°C	N/mm <sup>2</sup> 2.5 (psi) (350)
@ 150°C	N/mm <sup>2</sup> 2.0 (psi) (290)
@ 180°C	N/mm <sup>2</sup> 1.0 (psi) (160)

## GENERAL INFORMATION

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

## DIRECTIONS FOR USE

1. Allow material to reach ambient temperature before use.
2. When using cartridges or syringes, keep material in its original packaging.
3. When using other containers, keep container closed until it reaches ambient temperature prior to opening to avoid moisture condensation into the product.

## 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

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

## Disclaimer

### Note:

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Reference 0.1