



# ECCOBOND DX-10C

June 2010

## PRODUCT DESCRIPTION

ECCOBOND DX-10C provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Transparent and colorless
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• One component</li> <li>• No yellowing</li> <li>• Long work life</li> <li>• Non-conductive</li> </ul>
<b>Cure</b>	Heat cure
<b>Application</b>	Die attach
<b>Typical Package Application</b>	GaN LED's

ECCOBOND DX-10C is a thermosetting, dielectric adhesive developed for GaN blue and white LED chip bonding. It features strong heat / UV resistance and can be applied by pin transfer, stamping and dispensing.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity @ 25 °C, mPa·s (cP):

Speed 10 rpm	3,000
Work Life, hours	24
Shelf Life @ -20°C, months	6
Flash Point - See MSDS	

## TYPICAL CURING PERFORMANCE

### Cure Schedule

1 hour @ 140°C

Time shown does not include ramp-up time to cure temperature.

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 ppm/°C:

Below Tg	68
Above Tg	163

Glass Transition Temperature (Tg) by TMA, °C 116

## TYPICAL PERFORMANCE OF CURED MATERIAL

Die Shear Strength:

1.25 mm Si die @ 25°C, N	80
1.25 mm Si die @ 160°C, N	54

## 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.
2. Syringes should thaw a minimum of 90 minutes.

### 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: -20 °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

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

**Note**

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Reference 0.4