



ECCOBOND™ DX-20C™

March 2009

PRODUCT DESCRIPTION

ECCOBOND™ DX-20C™ provides the following product characteristics:

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

ECCOBOND™ DX-20C™ dielectric adhesive offers excellent adhesion strength, especially at wire bonding process temperature to minimize defect rate at assembly. It features strong heat / UV resistance and can be applied by pin transfer, stamping and dispensing.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Cone & Plate, mPa·s (cP):

@ 25°C Speed 10 rpm	12,000
Specific Gravity	1.17
Work Life @ 25°C, days	5
Shelf Life @ -20°C, months	6
Flash Point - See MSDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

1 hour @ 170°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:

Moisture Absorption @ Saturation, wt.% 60°C/90% RH exposure for 24 hrs	0.6
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TYPICAL PERFORMANCE OF CURED MATERIAL

Cured at 170°C for 1 hour

Die Shear Strength:

1.25 x 1.25 mm Si die on Ag plated Cu, N @ 25°C	125
1.25 x 1.25 mm Si die on Ag plated Cu, N @ 160°C	49

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.
3. After removing from the freezer, set the syringes to stand vertically while thawing.
4. DO NOT re-freeze. Once thawed, the adhesive should not be re-frozen.

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 0.2