



ECCOBOND 56C/Catalyst 11

June 2010

PRODUCT DESCRIPTION

ECCOBOND 56C/Catalyst 11 provides the following product characteristics:

Technology	Epoxy
Appearance	Silver
Filler Type	Silver
Components	Two component - requires mixing
Mix Ratio, by weight - Resin : Hardener	100 : 3.5
Product Benefits	<ul style="list-style-type: none"> Electrically conductive High bond strength High thermal conductivity No-flow characteristics Long pot life Excellent chemical resistance Excellent physical and chemical properties at elevated temperatures
Cure	Heat Cure
Application	Electrically Conductive Adhesive
Operating Temperature	-55 to 155 °C
Surfaces	Metals, Glass, Ceramics and Plastics

ECCOBOND 56C/Catalyst 11 adhesive is designed to make electrical connections where hot soldering is impractical or to make electrical connections to conductive plastics at locations which cannot be subjected to high temperatures.

ECCOBOND 56C can be used with a variety of catalysts. For more information on mixed properties when used with other available catalysts, please contact your local technical service representative for assistance and recommendations.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A Properties 56C

Specific Gravity	3.5
Shelf Life @ 25°C, months	6
Flash Point - See MSDS	

Part B Properties Catalyst 11

Viscosity @ 65 °C, mPa·s (cP)	35 to 60
Flash Point - See MSDS	

Mixed Properties

Specific Gravity	3.3
Working Time, 100 g mass. @ 25°C, hours	>4
Flash Point - See MSDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

8 hours @ 80°C or
2 hours @ 100°C or
1 hour @ 120°C

Post Cure

Post Cure: 2 to 4 hours at the highest expected use 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	
TMA:	
Below Tg	36
Thermal Conductivity, W/mk	3.0
Flexural strength, ASTM D790	N/mm ² 84
	(psi) (12,200)

Electrical Properties:

Volume Resistivity, ohm/cm @ 25°C	0.0002
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TYPICAL PERFORMANCE OF CURED MATERIAL

Lap Shear Strength :

Aluminum @ 25 °C	N/mm ² 5.5
	(psi) (800)

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Complete cleaning of the substrates should be performed to remove contamination such as oxide layers, dust, moisture, salt and oils which can cause poor adhesion or corrosion in a bonded part.
2. Some separation of components is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use.
3. Accurately weigh ECCOBOND 56C and Catalyst 11 into a clean container in the recommended ratio.



4. Blend components with spatula (2 to 3 minutes) and scrape the bottom and sides of the mixing container frequently to produce a uniform mixture.
5. Apply adhesive to all surfaces to be bonded and join together.
6. In most applications only contact pressure is required.

Storage

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

Optimal Storage: 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.

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

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

Note

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Reference 0.4