

LOCTITE ECCOBOND EO 1062

September 2012

PRODUCT DESCRIPTION

LOCTITE ECCOBOND EO 1062 provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Product Benefits	• High performance • Low flow
Filler Weight, %	64
Components	One-component
Cure	Heat cure
Application	Encapsulant - glob top
Typical Applications	Chip-on-board

LOCTITE ECCOBOND EO 1062 is designed to pass 1,000 hours of temperature/humidity/bias testing and thermal cycling up to 125°C. Exceptional viscosity stability at 25°C provides easier control of shot size using conventional time/pressure dispensing equipment.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield - RVF, 25 °C, mPa·s (cP):	
Spindle 6, speed 2.5 rpm	160,000
Spindle 7, speed 20 rpm	64,000
Specific Gravity @ 25 °C	1.78
Pot life @ 25°C, 200 grams mass, days	25
Gel Time @ 100°C, minutes	13
Shelf Life:	
@ 4°C, days	152
@ -40°C, days	213

Flash Point - See SDS

TYPICAL CURING PERFORMANCE

Recommended Cure Schedule

4 to 6 hours @ 125°C

Designed for robust packages which are not sensitive to stress.

Alternative Cure Schedule

3 hours @ 140°C

Designed to be used with packages which are affected by higher levels of stress. This cure will give optimum properties.

Curing below 25°C is not recommended.

The above cure profile is a guideline recommendation. 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 (40 to 120°C)	40
Glass Transition Temperature (Tg), °C	125
Extractable Ionic Content, ppm:	
Chloride (Cl-)	70
Sodium (Na+)	20
Potassium (K+)	20
Linear Shrinkage, %	1.07
Flexural strength	N/mm ² 64.8 (psi) (9,400)

Electrical Properties

Dielectric Constant / Dissipation Factor, IEC 60250:	
@ 25 °C:	
1kHz	4.97 / 0.0083
10 kHz	4.92 / 0.109
100 kHz	4.83 / 0.132
Volume Resistivity, IEC 60093, Ω·cm	1.9×10 ¹⁴
Surface Resistivity, IEC 60093, Ω	2.0×10 ¹⁴

GENERAL INFORMATION

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

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

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.

THAWING:

1. Allow container to reach room temperature before use.

Directions for use

1. For best results, dispense onto substrate warmed to 90°C.
2. This will help minimize air entrapment under bond wire.

STORAGE:

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

Optimal Storage : -40 °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

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

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