Technical Data Sheet

LOCTITE ECCOBOND CB0260-1

July 2018

PRODUCT DESCRIPTION

LOCTITE ECCOBOND CB0260-1 provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Product Benefits	• High purity • Green product • Excellent flow properties
Filler Weight, %	74
Cure	Heat cure
Application	Encapsulation
Typical Applications	Bare chip protection, Variety of advanced packages, Ball Grid Arrays (BGA's), Chip Scale Packages, Plastic Ball Grid Arrays or, Full arrays on Low temperature co-fired Ceramic (LTCC)
Operating Temperature	-65 to 150ºC

LOCTITE ECCOBOND CB0260-1 features excellent flow properties allowing the material to penetrate fine pitch wires and deep cavities without entrapping voids. This product can withstand solder reflow after being exposed to JEDEC Level 2 (85°C/60% RH, 168 hours) preconditioning. A cavity or potting dam is required for flow control.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield - HBT, 25 °C, mPa·s (cP):	
Spindle 14, speed 50 rpm	40,000
Specific Gravity	1.8
Pot Life @ 25 °C (time to double viscosity), hours	24
Shelf Life @ -40ºC , days	183
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Gel Time

Gel @ 121ºC, minutes 9

Recommended Cure Schedule

30 minutes @ 125°C plus 90 minutes @ 165°C

Adjust cure profile to accommodate delayed heat transfer due to warming of molds, boats, etc.

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

All measurements are taken at 25ºC, unless otherwise noted.

Physical Properties

Hardness, Shore D:	
After Gel	90
After Final Cure	90
Coefficient of Thermal Expansion, ppm/°C:	
Below Tg (40 to 120°C)	18
Above Tg (190 to 220°C)	67
Glass Transition Temperature(Tg), °C	149
Extractable Ionic Content, @ 121°C:	
Chloride (Cl-)	2
Potassium (K+)	1
Sodium (Na+)	2
Flexural Modulus , Kg/mm² :	
@ 25°C	1,250
@ 240°C	60

Electrical Properties

Dielectric Constant / Dissipation Factor @ 25ºC, IEC 60093:	
@ 1 KHz	3.4/0.01
Volume Resistivity, IEC 60093, Ω·cm	10×10^{16}

TYPICAL PERFORMANCE OF CURED MATERIAL

Miscellaneous

Flexural Strength, kg/mm² :	
@ 25°C	14.5
@ 240°C	1.9

GENERAL INFORMATION

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

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. Frozen packages must be completely thawed before use.
2. Store tip down and warm at room temperature until no longer cool to the touch (normally 60 to 90 minutes).
3. DO NOT thaw in an oven.

Directions for use

1. LOCTITE ECCOBOND CB0260-1 should be dispensed onto a substrate warmed to approximately 75°C. This will help minimize air entrapment.
2. Once dispensed, material should be cured within 30 minutes to prevent moisture contamination.
3. The cured properties of moisture contaminated material will be poorer than those described.

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

(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
N x 0.225 = lb/F
N/mm x 5.71 = lb/in
psi x 145 = N/mm²
MPa = N/mm²
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Disclaimer

Note:
The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

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