

LOCTITE ECCOBOND EN 1350

November 2013

PRODUCT DESCRIPTION

LOCTITE ECCOBOND EN 1350 provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Components	Two component - requires mixing
Mix Ratio, by weight - Part A: Part B	100 : 2.8
Product Benefits	<ul style="list-style-type: none"> • Non-conductive • Fast cure at low temperatures • Low temperature cure • High temperature resistance • Water resistant
Application	Encapsulant
Cure	Heat cure
Key Substrates	Polyethylene, Silicon, Copper

LOCTITE ECCOBOND EN 1350 encapsulant is designed for thermal sensor assembly applications.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Mixed Properties

Solids Content, %	100
Shelf Life @ 25 °C, days	183
Work Life @ 25 °C, days	3
Flash Point - See MSDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

1 hour @ 120°C

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

Hardness, Shore D	90
Coefficient of Thermal Expansion, TMA:	
Below Tg, ppm/°C	27
Above Tg, ppm/°C	100
Glass Transition Temperature, TMA, °C	103
Tensile Modulus @ 25 °C, DMA	GPa 7.5 (N/mm ²) (7,500) (psi) (1,087,783)

Electrical Properties

Volume Resistivity, 500Volts, ohms-cm:	
@ 25°C	3.6×10 ¹⁵
@ 150 °C	2.0×10 ¹¹
@ 25°C, after PCT, 121°C, 2 atm, 12 hours	1.0×10 ¹³

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 oil, grease, scale, mold release and loose foreign matter.
2. Apply adhesive to surface to be bonded.
3. 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.

Conversions

(°C x 1.8) + 32 = °F
 kV/mm x 25.4 = V/mil
 mm / 25.4 = inches
 N x 0.225 = lb
 N/mm x 5.71 = lb/in
 N/mm² x 145 = psi
 MPa = N/mm²
 MPa x 145 = psi
 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:

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