

LOCTITE ECCOBOND UV 9060

September 2015

PRODUCT DESCRIPTION

LOCTITE ECCOBOND UV 9060 provides the following product characteristics:

Technology	Acrylate
Appearance	Translucent light blue
Product Benefits	• Fast cure • One component • Cures in shadowed areas • Easy dispensability without stringing
Cure	Ultraviolet (UV)/ moisture
Application	Assembly
Typical Package Application	Local protection of WLCSP and BGA on circuit board

LOCTITE ECCOBOND UV 9060 no flow, UV/moisture cure encapsulant is designed for local circuit board protection.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Rheometer, mPa·s (cP):

@ 5 s ⁻¹	9,000
@ 50 s ⁻¹	2,000

Work Life @ 25°C, days 7

Shelf Life @ 5°C, days 183

Flash Point - See SDS

TYPICAL CURING PERFORMANCE

Recommended UV Cure

Light Source and Condition:

Metal halide doped spectrum UV lamp	
Lamp Power, W/in	300
Distance between lamp to substrate, inches	4
Irradiance UVA, EIT puck radiometer, mW/cm ²	566
Recommended Dose, seconds	5 to 25

Light Dose:

@ 5 seconds, J/cm ²	2.8
@ 25 seconds, J/cm ²	14.1

Moisture cure occurs at ambient temperature and humidity.

*Cures at least 0.25 inch and more under optimum conditions.

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 A, After 25 seconds UV Cure	68
Hardness, Shore D, After initial UV dose of 6.4 J/cm ² , moisture cure condition of 100%RH @ room temperature:	
Initial, after UV Cure	15
+ 1 day moisture cure	20
+ 2 days moisture cure	30
+ 3 days moisture cure	50
+ 4 days moisture cure	67
+ 8 days moisture cure	76

* Hardness increases with additional moisture cure

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Use cotton gloves to handle syringe. Touching the syringe with bare hands may induce thaw voids between the adhesive and inside walls of the syringe.
2. Handle the syringes by the end or, if packaged in bags, by the corner. A warm hand holding a cold syringe can sometimes cause formation of freeze/thaw voids.
3. 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.
4. Usable shelf life may vary depending on method of application and storage conditions.

THAWING:

1. DO NOT open the container before contents reach °C temperature. Any moisture that collects on the thawed container should be removed prior to opening the container.
2. Once material has reached room temperature, the adhesive should not be re-refrigerated.
3. Voids can form in the syringes if syringes are repeatedly re-refrigerated.
4. Typical thaw/warm-up times for different package sizes are shown below (products stored at -20°C):

@ 25°C, 10 cc syringes, minutes	30 to 45
@ 25°C, 30 cc syringes, minutes	45 to 60
@ 25°C, 55 cc syringes, hours	2
@ 25°C, 6 ounce cartridges, hours	3
5. For optimal performance, a consistent dispense temperature is recommended. This will reduce the effects of a potential temperature change between storage place and cleaning room.

Storage

Store in original, tightly covered containers in clean, dry areas. Storage information may be indicated on the product container labeling.

Optimal Storage : 5 °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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