

LOCTITE ECCOBOND LA 3032-78

October 2014

PRODUCT DESCRIPTION

LOCTITE ECCOBOND LA 3032-78 provides the following product characteristics:

Technology	Epoxy
Appearance	Yellow
Cure	Heat cure
Product Benefits	<ul style="list-style-type: none"> • One component • Fast cure at low temperatures • Excellent chemical resistance
Application	Encapsulant
Typical Assembly Applications	Ink jet applications and MEMS devices

LOCTITE ECCOBOND LA 3032-78 encapsulant is designed for high throughput assembly operations. It is formulated to withstand high heat distortion temperatures and bonds well to engineering plastics.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity , Casson, mPa·s (cP):	
Cone diameter 2 cm, Angle 2° @ 50 s ⁻¹	50,000
Shear Thinning Index , Speed 5/50 rpm	3.0
Density, ASTM-D-792, g/cm ³	1.32
Shelf Life @ 0°C (from date of manufacture), days	60
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

- 15 minutes @ 100°C
- 3 minutes @ 120°C
- 45 seconds @ 160°C

Cure times will depend on cure temperatures.

A ramp up temperature of not more than 1°C per second should be used.

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, ASTM D2240	>84
Glass Transition Temperature, DMA, °C	110
Ramp Rate 3°C/minute, 1 Hz, 40µm Amplitude	
Storage Modulus, Ramp Rate 3°C/minute, 1 Hz, 10µm:	
@ 25°C	N/mm ² 3,700
	(psi) (536,639)

DSC, ramp 10°C/minute to 220°C:

Onset, °C	116
Peak, °C	125
Enthalpy, J/g	285

GENERAL INFORMATION

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

THAWING:

1. Allow container to reach room temperature before use.
2. After removing from the freezer, set the syringes to stand vertically while thawing.
3. DO NOT open the container before contents reach 25°C temperature. Any moisture that collects on the thawed container should be removed prior to opening the container.
4. DO NOT re-freeze. Once thawed to 25°C, the adhesive should not be re-frozen.

DIRECTIONS FOR USE

1. Complete cleaning of the components and substrates should be performed to remove contamination such as dust, moisture, salt and oils which can cause electrical failure, poor adhesion or corrosion in an embedded part.
2. Apply adhesive to all surfaces to be bonded and join together.
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 : 0 °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

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

Disclaimer

Reference 0.1

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.

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