

# LOCTITE ECCOBOND PH 1

October 2018

## PRODUCT DESCRIPTION

LOCTITE ECCOBOND PH 1 provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Dark brown
<b>Cure</b>	Heat cure
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• One component</li> <li>• Non-conductive</li> <li>• Fast cure at low temperature</li> <li>• Low bleed</li> <li>• Chemical resistant</li> <li>• Humidity resistant</li> </ul>
<b>Application</b>	Encapsulation, Digital print head assembly

LOCTITE ECCOBOND PH 1 fast and low temperature adhesive is formulated for use in digital printing applications. This material may be applied by stencil/screen printing, pin transfer, dot dispensing or syringe dispensing.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield CP51, 25 °C, mPa·s (cP):	
Speed 5 rpm	3,500
Specific Gravity	1.15
Shelf Life @ -40°C, days	30
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

<b>Cure Schedule</b>
1 hour @ 150°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

<b>Physical Properties</b>	
Glass Transition Temperature, °C	127
Coefficient of Thermal Expansion :	
Below Tg, ppm/°C	211
Above Tg, ppm/°C	51
Modulus @ 25°C, GPa	20.6

## TYPICAL PERFORMANCE OF CURED MATERIAL

Die Shear Strength, Si to 42 alloy, kg/mm <sup>2</sup>	4.3
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## 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. 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 22°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 22°C, the adhesive should not be re-frozen.
5. Freeze-thaw voids can form in the syringes if syringes are repeatedly thawed and refrozen.

### DIRECTIONS FOR USE

1. Thawed material should immediately be placed on dispense equipment for use.
2. If the adhesive is transferred to a final dispensing reservoir, care must be exercised to avoid entrapment of contaminants and/or air into the adhesive..
3. Adhesive must be completely used within the product's recommended work life.

### 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. Storage below minus (-)40 °C or greater than minus (-)40 °C can adversely affect product properties.**

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

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Reference 1