

# **LOCTITE ECCOBOND LUX 3042M**

October 2016

## PRODUCT DESCRIPTION

LOCTITE ECCOBOND LUX 3042M provides the following product characteristics:

Technology	Acrylate
Color	Pale yellow
Cure	Ultraviolet (UV) light, Visible light and Heat cure
Product Benefits	<ul> <li>One component</li> <li>Dual cure system</li> <li>Non-conductive</li> <li>Good adhesion on various substrates</li> </ul>
Application	Assembly

LOCTITE ECCOBOND LUX 3042M dual cure adhesive is designed for use in the assembly of temperature sensitive electronic components. This product is formulated to initially cure when exposed to UV light, followed with a secondary thermal cure to achieve maximum performance.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, TA Rheometer, mPa·s (cP):

Cone 20 mm, Angle 2° @ Shear rate 20 s <sup>-1</sup>	85,000
Thixotropic Index (0.1/1 rpm)	1.2
Specific Gravity, g/cm³	1.1
Flash Point - See SDS	

## **TYPICAL CURING PERFORMANCE**

### **Recommended UV Cure**

Light Source:

High Pressure Mercury Lamp:

UV Wavelength, nm 300 to 500
Light Intensity, mW/cm² 100
Exposure Time, seconds 5

## **Secondary Thermal Cure Condition**

30 minutes @ 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		85
Coefficient of Thermal Expansion :		
Below Tg, ppm/°C		87
Above Tg, ppm/°C		174
Glass Transition Temperature (Tg) by TMA,	°C	114
Modulus	N/mm²	1,700
	(psi)	(247,000)

## TYPICAL PERFORMANCE OF CURED MATERIAL

Sample cured 30 minutes @ 120°C.

Lap Shear Strength , FR4 / FR4, 0.075 mm thickness,  $\,$  >8 N/mm²

#### **GENERAL INFORMATION**

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

#### **DIRECTIONS FOR USE**

- To ensure the long term performance of the bonded assembly, complete cleaning of the substrates should be performed to remove contamination such as oxide layers, moistures, dust, salts and oils which can cause poor adhesion or corrosion in a bonded part.
- 2. Apply adhesive to all surfaces to be bonded and join together.

#### 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.

## 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.

#### Conversions

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

# 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.



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