

# LOCTITE UV8800M

September 2016

## PRODUCT DESCRIPTION

LOCTITE UV8800M provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Medium grey paste
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• One component</li> <li>• Medium viscosity</li> <li>• Cures rapidly</li> <li>• Low shrinkage</li> <li>• Excellent adhesion</li> </ul>
<b>Filler Weight, %</b>	53.6
<b>Cure</b>	Ultraviolet (UV) light
<b>Application</b>	Encapsulant
<b>Typical Package Application</b>	Chip scale packages and BGA
<b>Substrates</b>	Glass, Epoxy, Polyimide and Polyester

LOCTITE UV8800M epoxy encapsulant is developed to meet high temperature thermal cycling specifications. It cures to form a hard translucent coating when exposed to UV light of sufficient intensity. The curing of the product is not inhibited by oxygen, resulting in excellent surface cure. Its viscosity characteristics and deaerated condition make it suitable for accurate dispensing with excellent shape control.

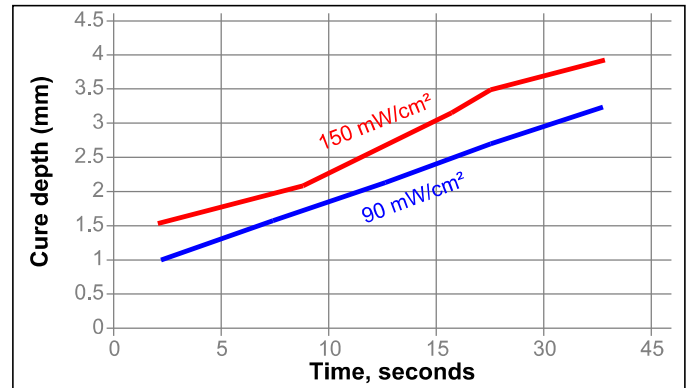
## TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity @ 25 °C, mPa·s (cP)	2,500 to 4,000
Specific Gravity	1.6
Filler Particle Size, µm:	
D95	21
D50	5
Shelf Life @ 0 to 5°C, months	6
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

### Typical UV Cure Condition

Medium pressure mercury lamp:	
Light Dose, mW/cm <sup>2</sup>	100
Exposure Time, seconds	2
UV radiation, nm (UVA)	315 to 400



LOCTITE UV8800M can be cured by irradiation with ultraviolet and visible light as well as LED-UV light with single wavelength distribution of sufficient intensity. Cure rate and depth of cure depend on the intensity, spectral distribution of the light source, exposure time and light transmittance of the substrate through which the light must pass.

## TYPICAL PROPERTIES OF CURED MATERIAL

### Physical Properties :

Coefficient of Thermal Expansion ISO 11359-2:	
Below T <sub>g</sub> , ppm/°C	41
Above T <sub>g</sub> , ppm/°C	135
Glass Transition Temperature (T <sub>g</sub> ), °C	29
Shore Hardness, Durometer D	78
Extractable Ionic Content, MIL-S-883, ppm:	
Chloride (Cl-)	34
Fluoride (F-)	237
Water Absorption, %:	
24 hrs @ 25°C	0.9
DMA Modulus @ 25°C, MPa	2,850

## 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.