

# LOCTITE DSP 3320

June 2017

## PRODUCT DESCRIPTION

LOCTITE DSP 3320 provides the following product characteristics:

<b>Technology</b>	Acrylic
<b>Appearance</b>	Light yellow liquid
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• Easily applied by dispensing or jetting</li> <li>• Excellent flexibility</li> <li>• Good moisture resistance</li> <li>• Controlled bondline thickness</li> </ul>
<b>Cure</b>	UV LED
<b>Application</b>	Encapsulation, Coating
<b>Typical Assembly Applications</b>	OLED or LCD module assembly

LOCTITE DSP 3320 encapsulant is designed for COG/COF for LCD module or micro patterned PI substrate for OLED module assembly applications. It is formulated with excellent flexibility properties to improve crack/fracture resistance and delamination for overall improvement of package reliability.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity by Rheometer, mPa·s (cP):

Plate 20 mm, 2 inch gap @ Shear rate 15 s<sup>-1</sup> 670

Density, gm/cc 1.04

Shelf Life @ 25°C (from date of manufacture) (estimated), days 270

Flash Point - See SDS

## TYPICAL CURING PERFORMANCE

### Recommended UV Cure Condition

High Pressure Mercury Lamp

Irradiance UVA, mJ/cm<sup>2</sup> ~1,000

UV LED

Single wavelength distribution, nm 365

Irradiance, mJ/cm<sup>2</sup> 1,000

### Shrinkage on Cure

Cure Shrinkage, % 2.2

Cure rate and ultimate depth of cure depend on light intensity, spectral distribution of light source, exposure time and light transmittance of the substrate through which the light must pass.

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

Tensile Modulus at break, @ 25°C, Texture analyzer, MPa 325

Elongation at break, @ 25°C, Texture analyzer, % 290

Water Vapor Transmission Rate (WVTR) @ 50°C/ 100% RH, MOCON Instrument, g/mil/100 inch<sup>2</sup> /day 10.6

## TYPICAL PERFORMANCE OF CURED MATERIAL

### Miscellaneous

Tensile Strength @ 25°C, Texture analyzer, MPa 18

## GENERAL INFORMATION

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

## DIRECTIONS FOR USE

1. Clean all surfaces to be bonded.
2. This product is light sensitive; exposure to daylight, UV light or artificial lighting should be kept to a minimum during storage and handling.
3. This material can be applied by .
4. Cooling should be provided for temperature sensitive substrates such as thermoplastics.
5. Excess uncured adhesive can be wiped away with organic solvent (e.g. Acetone).

## 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.

## STORAGE:

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

**Optimal Storage: 18 to 25°C. Storage below 18°C or above 25°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:

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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