Technical Data Sheet

# CE3317M-5 UV

## PRODUCT DESCRIPTION

CE3317M-5 UV provides the following product characteristics:

| | |
|---|---|
| Technology | Epoxy/Acrylate |
| Appearance | Amber |
| Product Benefits | Dual cure |
| Cure | Ultraviolet (UV) light, Heat cure |
| Application | Assembly |
| Typical Assembly Applications | Image sensor module assemblies |

CE3317M-5 UV dual cure adhesive is designed for use in the assembly of temperature sensitive electronic components. The maximum performance of this material is achieved by exposure to UV light of suffecient intensity, followed by thermal cure.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

| | |
|---|---|
| Viscosity, mPa•s (cP): | |
| @ 25° C | 5,000 |
| Specific Gravity | 1.2 |
| Pot life @ 25 ° C, days | 7 |

## TYPICAL CURING PERFORMANCE

Recommended UV Cure
Light Source and Condition:
Medium pressure mercury lamp

| | |
|---|---|
| UV Wavelength, nm | 220 to 260 |
| Light Intensity, mW/cm² | 100 |
| UV Tack-Free Time, seconds | 1 |

### Recommended Heat Cure

30 minutes @ 60° C
25 minutes @ 70° C
20 minutes @ 80° C

The above cure profile is a guideline recommendation. Cure rate and ultimate depth of cure depend on light intensity, spectral distribution of light source, exposure time and the light transmittance of the substrate.

With all fast cure systems, the minimum required time for cure depends on the rate of heating. Cure rate depends on the mass of the material to be heated and intimate contact with the heat source. Use suggested cure conditions as general guidelines. Other cure conditions may yield satisfactory results.

## TYPICAL PROPERTIES OF CURED MATERIAL

Sample cured 5 secs @ 100 mW/cm² plus 30 min @ 80° C

| Physical Properties: | |
|---|---|
| Hardness, Shore D, ASTM D2240 | 88 |
| Glass Transition Temperature (Tg) by TMA, ° C | 85 |
| Coefficient of Thermal Expansion : | |
| Alpha 1, cm/cm/°C | 49×10-6 |
| Alpha 2, cm/cm/°C | 175×10-6 |
| Volume Shrinkage on Cure, % | 2.4 |
| Linear Shrinkage on Cure, % | 1.3 |

## TYPICAL PERFORMANCE OF CURED MATERIAL

Sample cured 2 secs @ 100 mW/cm² plus 30min @ 80° C

Lap Shear Strength :

| | | |
|---|---|---|
| Polycarbonate | N/mm² | 1.8 |
| | (psi) | (261) |

## Storage

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

## Optimal Storage : 2 to 8 ° C

Material removed from containers may be contaminated during use. Do not return product to the original container. Longain 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.