Technical Data Sheet

# LOCTITE ECCOBOND DFB 3332

July 2019

## PRODUCT DESCRIPTION

LOCTITE ECCOBOND DFB 3332 provides the following product characteristics:

| | |
|---|---|
| **Technology** | Acrylate |
| Appearance | Colorless liquid |
| Product Benefits | • Fast UV/LED cure<br>• Excellent flexibility<br>• High adhesion to PI substrate<br>• VOC free |
| **Cure** | Ultraviolet (UV) light, UV LED |
| **Application** | Encapsulation, Glob top |
| Typical Assembly Applications | OLED or LCD module assembly |

LOCTITE ECCOBOND DFB 3332 one part acrylate adhesive is formulated to have excellent flexibility to help eliminate cracking or delamination.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

| | |
|---|---|
| Solids Content, % | 100 |
| Density, gm/cc | 1.04 |
| Viscosity by Rheometer @ 25 °C, mPa·s (cP): | |
| Plate 20 mm, 2 inch gap @ Shear rate 15 $s^{-1}$ | 1,220 |
| Shelf Life @ 25 °C (estimated), months | 180 |
| Flash Point - See SDS | |

## TYPICAL CURING PERFORMANCE

**Recommended UV Cure Condition**

Light Source and Condition

| | |
|---|---|
| Mercury vapor or electrodeless lamp: | |
| Irradiance, mJ/cm² | >3,000 |
| Light Dose, mW/cm² | 100 |
| Exposure Time, seconds | 30 |
| LED lamp: | |
| Irradiance, J/cm² | >10 |
| Light Dose, W/cm² | 2 |
| Exposure Time, seconds | 5 |

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

Sample cured 30 seconds @ 100 mW/cm² , using a UVLOC 1000 lamp

**Physical Properties**

| | |
|---|---|
| Glass Transition Temperature, DMA, °C | 36.5 |
| Tensile Modulus @ 23°C (±1°C), texture tension, 40 mm/min, MPa | 30.7 |
| Elongation @ break, texture test, % | 283 |
| Water Vapor Permeability Coefficient (WVPC), 50°C/100% RH, MOCON Instrument, g-mil/100 inch² /day | 12.6 |

## GENERAL INFORMATION

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

## DIRECTIONS FOR USE

1. This product is light sensitive and should be kept to a minimum exposure to UV/Visible light during storage and handling.
2. The product should be dispensed from application with black feedlines.
3. For best performance, bond surface should be clean and free from grease.
4. Cure rate is dependent on lamp intensity, distance from light source, depth of cure needed or bondline gap and light transmittance of the substrate through which the radiation must pass.
5. Cooling should be provided for temperature sensitive substrates such as thermoplastics.
6. Crystalline and semi-crystalline thermoplastics should be checked for risk of stress cracking when exposed to liquid adhesive.
7. Excess uncured adhesive can be wiped away with organic solvent (e.g. Acetone).
8. Bonds should be allowed to cool before subjecting to any service loads.

## STORAGE:

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

**Optimal Storage : 25 °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**
(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
N x 0.225 = lb/F
N/mm x 5.71 = lb/in
psi x 145 = N/mm²
MPa = N/mm²
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

**Disclaimer**

Reference 1