

# LOCTITE ECCOBOND DS 3318LVT

September 2012

# PRODUCT DESCRIPTION

LOCTITE ECCOBOND DS 3318LVT provides the following product characteristics:

Technology	Acrylate
Appearance	Transparent liquid
Product Benefits	Low energy cure
	Fast cure
	<ul> <li>Excellent moisture resistance</li> </ul>
	High flexibility
	Reworkable
Cure	Ultraviolet (UV) light, Visible light or UV LED
Application	Coating and Sealant
Typical Assembly Applications	LCD module assembly

LOCTITE ECCOBOND DS 3318LVT fast, UV curable material is specially formulated for use in applications requiring lower energy cure. Its excellent moisture resistance is designed to provide protection in COG-LCD modules.

# TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, HAAKE Cone PK 1 2º @ 25 °C, mPa·s (cP):		
@ Shear rate of 36 s <sup>-1</sup>	142	
Shelf Life @ 25°C (from date of manufacture), days	183	
Flash Point - See MSDS		

# TYPICAL CURING PERFORMANCE

# Recommended UV Cure

Light Source and Condition:	
High pressure mercury lamp	
Light Intensity, mW/cm <sup>2</sup>	100
Exposure Time, seconds	15

# **Tack Free Time**

Time required to achieve tack-free surface, seconds	5
Depth of Cure	

Depth of Cure, mm	15
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LOCTITE ECCOBOND DS 3318LVT 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.

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:**

Modulus	N/mm² (psi)	408 (59,175)
Extractable Ionic Content, , ppm:		
Chloride (Cl-)		7.0
Sodium (Na+)		1.0
Water Vapor Permeability Coefficient , g.mil / 7	100 in² :	
24 hrs, 50°C/100% RH		29.7

## **GENERAL INFORMATION**

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

#### 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.

# DIRECTIONS FOR USE

- 1. For best performance bond surfaces should be clean and free from grease.
- 2. This product is light sensitive; exposure to daylight, UV light and artificial lighting should be kept to a minimum during storage and handling.
- 3. The product should be dispensed from application with black feedlines.
- 4. Cure rate is dependent on lamp intensity, distance from light source, depth of cure needed or bondline gap and light transmission of the substrate through which the radiation must pass.

## 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.



# Conversions

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