

LOCTITE[®] ECCOBOND EN UV4201

December 2021

PRODUCT DESCRIPTION

LOCTITE[®] ECCOBOND EN UV4201 provides the following product characteristics:

Technology	Acrylate
Appearance	Red liquid
Solids Content, %	
Cure	Ultraviolet (UV) / Visible light
Application	Electronic Encapsulants, Circuit Board Encapsulant, Bonding
Product Benefits	• One component • Low sensitization • Low odor • Fluorescent under UV light • Thixotropic

LOCTITE[®] ECCOBOND EN UV4201 is a low odor, low sensitization, thixotropic adhesive designed for use on a wide assortment of plastic substrates. The viscosity of this product makes it well suitable for applications where flow control and dispense volume are highly required.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Rheometer, Cone and Plate @ 25°C, Cone diameter 40 mm, Angle 2°, mPa·s (cP):

@ Shear rate of 2 s ⁻¹	45,600
@ Shear rate of 20 s ⁻¹	8,620
Specific Gravity, g/cm ³	1.1
Shelf Life @ 8 to 28°C, days	180

TYPICAL CURING PERFORMANCE

Recommended UV Cure Condition

LED UV Light

Light Intensity, mW/cm ²	500
UV Wavelength, nm	365
Exposure Time, seconds	15

The above cure profile is a guideline recommendation. These cure conditions (time and temperature) may vary based on customers' experience and specific application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Sample cured UV LED: 6500 mJ/cm² @ 365nm.

Hardness, Shore A, ISO 868	86
Elongation, ISO 527-2, %	122
Tensile Strength, ISO 527-2, N/mm ²	17
Tensile Modulus, ISO 527-2, N/mm ²	18

Adhesion Properties

Sample cured UV LED: 6500 mJ/cm² @ 365nm.

Lap Shear Strength, ASTM D1002: On Polycarbonate, N/mm ²	20
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GENERAL INFORMATION

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

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected with a sealant for chlorine or other strong oxidizing materials.

Data Ranges

The data contained herein may be reported as a typical value and/or range values based on actual test data and are verified on a periodic basis.

STORAGE

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

Optimal Storage: 8 to 28°C. Storage below 8°C or above 28°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 Henkel Representative.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\text{N} \times 0.225 = \text{lb/F}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{psi} \times 145 = \text{N/mm}^2$
 $\text{MPa} = \text{N/mm}^2$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local Henkel representative for assistance and recommendations on the specifications of this product.

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Reference **N/A**