

LOCTITE ECCOBOND EN 190024FL

June 2020

PRODUCT DESCRIPTION

LOCTITE ECCOBOND EN 190024FL provides the following product characteristics:

Technology	Acrylate
Appearance	Translucent light blue
Product Benefits	<ul style="list-style-type: none"> • One component • Fluorescent • Fast UV cure
Cure	Ultraviolet (UV) light, Visible light
Application	Encapsulation, Glob top & Encap
Key Substrates	Glass, plastics and most metals

LOCTITE ECCOBOND EN 190024FL is the fluorescent, light blue color version of LOCTITE 190024 primarily formulated for easy inline inspection. It is recommended for bonding rigid and flexible PVC to polycarbonate where large gap filling capabilities (0.25mm) and a flexible joint are desired. This flexible material is engineered to enhance the load bearing and shock absorbing properties of the bonded area.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity by Rheometer, Cone and Plate, mPa-s (cP):	
@ 2 s ⁻¹	38,800
@ 20 s ⁻¹	8,000
Shelf Life @ 8 to 28 °C (estimated), days	180
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Recommended UV Cure

Light Source and Condition:	
Fusion electrodeless Bulb, D Bulb	
Metal halide doped spectrum UV lamp:	
Light Intensity, mW/cm ²	100
UV Wavelength, nm	365
Light Dose, seconds	20
Depth of cure , under optimum conditions, at least, inch	0.20

LOCTITE ECCOBOND EN 190024FL can be cured by exposure to UV and/or visible light of sufficient intensity. Curing performance is enhanced by exposure to UV light at 365 nm. Cure conditions (time and light intensity) may vary based on customers' experience and their application requirements as well as customer curing equipment.

Fixture Time

UV fixture time is defined as the light exposure time required to develop a shear strength of 0.1 N/mm².

UV Fixture Time, ISO 4587, Glass microscope slides, seconds:
100 mW/cm² , measured @ 365 nm ≤3

TYPICAL PROPERTIES OF CURED MATERIAL

Sample cured @ 100 mW/cm² for 20 seconds using Fusion electrodeless Bulb, D Bulb light source.

Physical Properties

Elongation , Texture analyzer,%	255
Tensile Modulus	N/mm ² 270 (psi) (39,160)
Tensile Strength	N/mm ² 20.5 (psi) (2,973)

TYPICAL PERFORMANCE OF CURED MATERIAL

Sample cured 20 seconds @ 100 mW/cm² , using a LED 365nm lamp.

Shear Strength

Lap Shear Strength :	
Polycarbonate to Polycarbonate	N/mm ² 18 (psi) (2,610)
Polycarbonate to PI	N/mm ² 13.8 (psi) (2,001)
Polycarbonate to PET	N/mm ² 13 (psi) (1,885)
Polycarbonate to FR4	N/mm ² 17.5 (psi) (2,538)

GENERAL INFORMATION

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

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. This product is light sensitive; exposure to daylight, UV light and artificial lighting should be kept to a minimum during storage and handling.
2. Complete cleaning of the substrate should be performed to remove contamination such as oil, grease, scale, mold release and loose foreign matter.

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 greater than 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 Technical Service Center or Customer Service Representative.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$

$\text{kV/mm} \times 25.4 = \text{V/mil}$

$\text{mm} / 25.4 = \text{inches}$

$\text{N} \times 0.225 = \text{lb/F}$

$\text{N/mm} \times 5.71 = \text{lb/in}$

$\text{psi} \times 145 = \text{N/mm}^2$

$\text{MPa} = \text{N/mm}^2$

$\text{N} \cdot \text{m} \times 8.851 = \text{lb} \cdot \text{in}$

$\text{N} \cdot \text{m} \times 0.738 = \text{lb} \cdot \text{ft}$

$\text{N} \cdot \text{mm} \times 0.142 = \text{oz} \cdot \text{in}$

$\text{mPa} \cdot \text{s} = \text{cP}$

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