UV-EE 3611
UV-CURING EPOXY RESIN

PRODUCT DESCRIPTION

Born2Bond™ UV-EE 3611 is a one component epoxy-based UV-curing resin which cures quickly via UVA light creating a hard polymer with good internal flexibility.

This product is suitable for high speed process thanks to its thixotropic behaviour.

UV-EE 3611 exhibits excellent flow characteristics as well as low stress cure (tension equalizing) favorable behavior in case of bending stress.

UV-EE 3611 demonstrates excellent cure-through and adhesion to a variety of materials. (Metals, Plastics, Glass, Ceramic.)

KEY FEATURES

- UV/LED Curing, 1-component Epoxy, free of solvents and VOCs.
- Cures to a hard, tack-free, resilient epoxy polymer.
- Easy and fast application on automatic dosing and dispensing equipment.
- Durable Adhesive for transparent substrates.
- Humidity & thermal resistance
- RoHS Compliant (2015/863/EU)
- Halogen Free (IEC 61249-2-21)

APPLICATIONS

Electronic components, chip modules (smart card, sim card, etc.) encapsulation.

METHOD OF USE & CURING

Material should be allowed to warm to room temperature (25°C – 30°C) ideally on a tube roller before use. This material contains powder fillers, which can settle over time. Check bottom of container and remix efficiently if settlement has occurred.

Optimal Wavelength [nm] 310-365
Optimal Intensity [mW/cm²] 140 - 175
Optimal Time [sec] 60

Cure kinetic may be accelerated with heat.

STORAGE/SHELF LIFE

Store material in a cool, dry location at a temperature between 0°C and 10°C. Material is sensitive to UV and visible light. Avoid exposure to light as much as possible and store in original light blocking container. When stored properly at 5°C this product has a shelf life of 12 months (in unopened original container)

HEALTH/SAFETY

The Safety Data Sheet is available on request and should be consulted for proper handling, cleanup and spill containment before use. Keep containers covered to minimize contamination.

PRODUCT CHARACTERISTICS

<table>
<thead>
<tr>
<th>Basis Technology</th>
<th>Modified Epoxy</th>
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<tbody>
<tr>
<td>Filler Content</td>
<td>40%</td>
</tr>
<tr>
<td>Appearance / Color</td>
<td>Translucent</td>
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<tr>
<td>Temperature use Range</td>
<td>-55°C to 150°C</td>
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</table>

UNCURED PHYSICAL PROPERTIES

| Viscosity [Brookfield @50rpm @25°C]: | 5,000 - 7,000 |
| Viscosity [Brookfield @5rpm @25°C]:  | 12,000 - 18,000 |
| Thixotropic Index           | 2.4 - 2.6      |
| Hardness [Shore D]          | 78 - 84        |
| Glass Transition [°C]       | 70 - 72        |

CURED PHYSICAL PROPERTIES

| Tensile Strength [MPa] ISO 37 | 52 - 58 |
| Elongation at break [%] ISO 37 | 2 - 4   |

Always use glasses and gloves when applying adhesives.
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