

UV-EE 3611

UV-CURING EPOXY RESIN

TECHNICAL DATA SHEET

March 2022

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/cm ²]	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

Basis Technology	Modified Epoxy
Filler Content	40%
Appearance / Color	Translucent
Temperature use Range	-55°C to 150°C

UNCURED PHYSICAL PROPERTIES

Viscosity [<i>Brookfield @50rpm @25°C</i>]:	5.000 - 7.000
Viscosity [<i>Brookfield @5rpm @25°C</i>]:	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

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