IQ-BOND 2280

"Glob Top" or "Fill" Adhesive

Pre-Mixed, One Component, Epoxy-based Adhesive for Glob Top or Fill Applications

Product Description:

IQ-BOND 2280 is a solvent-free, one-component, pre-mixed, thermoset epoxy based adhesive, developed for "Glob Top" or "Fill" applications .

IQ-BOND 2280 can be cured at temperatures as low as 80°C, and is therefore an ideal material for substrates or applications which cannot resist higher temperatures.

The rheology is optimized for dispense applications. The particle size of the filler allows easy dispensing with needles with internal diameter > 400 µm.

However, also printing processes have demonstrated to be feasible with IQ-BOND 2280.

Unlike many other single-component adhesives, characterized by a short potlife, IQ-BOND 2280 has a long potlife of > 2 days at room temperature.

When fully cured, IQ-BOND 2280 is resistant to moisture, cleaning agents and dilute acids and bases.

IQ-BOND 2280 is a solvent-free, 100% solids material and RoHS / REACH compliant.

For cleaning un-cured IQ-BOND 2280 from stencils, screens, squeegee, or other equipment, the use of IQ-CLEANER 9500 is recommended.

Product Properties:

- Appearance: Black
- Chemistry: Epoxy
- Odor: Faint
- Mix-Ratio: Not Applicable – pre-mixed single component adhesive
- Fineness: < 100 µm
- Viscosity: ~ 13.000 mPa.s (Brookfield CP51 at 2,5 rpm – T° 28°C)

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- Density ~ 1,25 gr/cc
- Dielectric Constant ~ 4,0 from 1 Hz – 100 MHz
- Electrical Dissipation Factor < 0,02 (from 1Hz to 100 MHz)
- Cure Speed:
  - 1 minutes @ 150°C
  - 4 - 5 minutes @ 120°C
  - 60 minutes @ 80°C

For good mechanical strength, cure according above conditions is recommended, and a minimum of 80°C required. The final bond strength will depend on the residence time at the given cure temperature. Typically, a higher curing temperature, as well as a longer cure time will result in higher adhesion strength, and improved polymer crosslinking. For example 120 minutes cure at 80°C will further improve adhesion strength and stress relief in the resin.

Processing parameters:

IQ-BOND 2280 is suitable for most common dispensing systems.
Prior to use, it's advised to let the adhesive IQ-BOND 2280 equilibrate to room temperature. Temperature conditions of about 25°C, and relative humidity not higher than 70% are recommended for optimum performance. Higher temperatures may have an effect on viscosity. Too high humidity, may cause moisture accumulation in the adhesive, which can reduce the worklife of IQ-BOND 2280.

Storage stability:

Storage stability is 2 months from date of production, when stored at temperatures below 5°C, in closed containers. At -20°C, IQ-BOND 2280 has a storage stability of minimum 6 months.

At room temperature, IQ-BOND 2280 has a long worklife / potlife of several days.