



IQ-BOND 3401

Surface Mount Adhesive for High-Speed Dispensing

Pre-Mixed, One Component, Epoxy-based Adhesive for High-Speed Dispensing Applications

Product Description:

IQ-BOND 3401 is a solvent-free, one-component, pre-mixed, thermoset epoxy based adhesive, developed for high speed dispensing and/or jetting applications.

It has been designed specifically for the bonding of surface mount devices (SMD), to printed circuit boards, prior to the wave soldering process. Characterized by excellent dispensability, resulting in high dot profiles. Also, it's chemistry has been selected to provide good green strength, resulting in optimum pick & place performance of all common SMD components.

IQ-BOND 3401, despite its high reactivity, has a low exotherm.

Unlike many other single-component adhesives, characterized by a short potlife, IQ-BOND 3401 has a very long potlife of > 1 month at room temperature.

When fully cured, IQ-BOND 3401 is resistant to moisture, cleaning agents and dilute acids and bases. Also it exhibits very good high thermal resistance, for example typical SnPb-, as well as lead-free soldering processes.

IQ-BOND 3401 is a solvent-free, 100% solids material.

For cleaning un-cured IQ-BOND 3401 from stencils, screens, squeegee, or other equipment, the use of IQ-CLEANER 9500 is recommended.

Product Properties:

- Appearance: Red Thixotropic Paste
- Chemistry: Epoxy
- Odor: Faint
- Mix-Ratio: Not Applicable – pre-mixed single component adhesive
- Fineness: < 20 μm
- Viscosity: ~ 80.000 mPa.s (Brookfield CP52, 25°C at 1 rpm)
- Thixotropic Index > 5 (Brookfield SSA, SC-25 – ratio of 5 rpm / 50 rpm)
- Density ~ 1,3 gr/cc



- Cure Speed:
 - 30 “ @ 175°C
 - 1 – 2 minutes 150°C
 - 5 minutes 120°C

For good mechanical strength, cure according above conditions is recommended, and a minimum of 100°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.

Processing parameters:

Prior to use, it's advised to let the adhesive IQ-BOND 3401 equilibrate to room temperature. Depending the size of packaging, 1 to 2 hours are typically recommended.

Storage stability:

Storage stability is 6 months from date of production, when stored at temperatures below 8°C, in closed containers.

At room temperature, IQ-BOND 3401 has a long worklife / potlife of > 1 month.

Attention:

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