

# IQ-BOND 2132

## Flexibilized, Low-Stress, Dielectric, 1-Komponent Adhesive

### Pre-Mixed, One Component, Solvent-Free, Hybrid-Epoxy Adhesive

#### Product Description:

IQ-BOND 2132 is a solvent-free, one-component, pre-mixed adhesive, developed for applications where flexibility is required.

The rheology of IQ-BOND 2132 allows both dispensing, printing, as well as stamping processes. It has a high adhesion strength to substrate finishes commonly used in microelectronics applications.

IQ-BOND 2132, in contrast to many other epoxy adhesives, is based on special selected flexibilized chemistry, making it an ideal solution for bonding applications of dissimilar materials with significant differences in CTE (coefficient of thermal expansion).

When fully cured, IQ-BOND 2132 is resistant to moisture, cleaning agents and dilute acids and bases. Its chemistry has been selected to combine flexibility with great adhesion, making it a preferred solution for bonding thermally mismatched substrates such as ceramic to aluminum, or ceramic to copper.

The chemistry of IQ-BOND 2132 allows operation temperatures between -50°C and +200°C.

IQ-BOND 2132 is a solvent-free, 100% solids material and RoHS / REACH compliant.

For optimum curing performance, it's recommended to do the cure process in a conveyor belt oven. When curing IQ-BOND 2132 in a convection oven, it is recommended to apply a longer curing time for optimum adhesion properties.

For cleaning un-cured IQ-BOND 2132 from stencils, screens, squeegee, or other equipment, the use of IQ-CLEANER 9500 is recommended.

IQ-BOND 2132 is the dielectric version of IQ-BOND 5132-CE.



### Product Properties:

- Appearance: Yellow-Orange paste
- Chemistry: Hybrid
- Odor: Faint
- Mix-Ratio: Not Applicable – pre-mixed “one component” adhesive
- Fineness: < 25 µm
- Viscosity: ~ 40.000 mPa.s (CP52, RVII – at 25°C / 1 rpm)
- Density ~ 1,1 gr/cc
- Adhesion Strength: > 200 kg/cm<sup>2</sup>
- Hardness: ~ 45 shore D / 95 shore A
- Cure Speed\*:
  - 15 minutes @ 175°C
  - 60 minutes @ 150°C
  - 90 minutes @ 120°C

For good mechanical strength, cure according above conditions is recommended. 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:

IQ-BOND 2132 is suitable for most dispensing systems. Prior to use, it's advised to let the adhesive IQ-BOND 2132 equilibrate to room temperature.

### Storage stability:

When stored at temperatures below -20°C, in closed and sealed containers, the storage stability of IQ-BOND 2132 is 6 months from date of production. At temperatures < -40°C, the shelflife is 12 months.

At room temperature, IQ-BOND 2132 has a worklife / potlife of ~ 12 hours.

#### Attention:

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