



IQ-BOND 2432-T

Flexibilized, Dielectric, Thermally Conductive, 1-Komponent Adhesive with Non-Abrasive Filler, for Thin Bondlines

Pre-Mixed, One Component, Hybrid Thermally Conductive Adhesive

Product Description:

IQ-BOND 2432-T is a solvent-free, one-component, pre-mixed adhesive, developed for applications where thermal conductivity is required.

The rheology of IQ-BOND 2432-T 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 2432-T, in contrast to many other thermally conductive adhesives, is based on very fine non-abrasive filler technology, enabling very thin bondlines. The non-abrasive nature of the filler can have a significant impact on the lifetime of the used dispensing equipment, especially in high volume applications.

When fully cured, IQ-BOND 2432-T 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. Also, the chemistry allows operation temperatures between -50°C and +200°C.

IQ-BOND 2432-T 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 2432-T in a convection oven, it is recommended to apply a longer curing time for optimum adhesion properties.

For cleaning un-cured IQ-BOND 2432-T from stencils, screens, squeegee, or other equipment, the use of IQ-CLEANER 9500 is recommended.



Product Properties:

- Appearance: Off-white / milky paste
- Chemistry: Hybrid
- Odor: Faint
- Mix-Ratio: Not Applicable – pre-mixed “one component” adhesive
- Fineness: < 25 µm
- Viscosity: ~ 50.000 mPa.s (CP51, RVII – at 25°C / 10 rpm)
- Density ~ 1,3 gr/cc
- Thermal Conductivity: ~ 0,9 W/m.K
- Adhesion Strength: > 200 kg/cm²
- Hardness: ~ 25 shore D / 85 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 2432-T is suitable for most dispensing systems. Prior to use, it's advised to let the adhesive IQ-BOND 2432-T equilibrate to room temperature.

Storage stability:

When stored at temperatures below -20°C, in closed and sealed containers, the storage stability of IQ-BOND 2432-T is 6 months from date of production. At temperatures < -40°C, the shelflife is 12 months.

At room temperature, IQ-BOND 2432-T has a worklife / potlife of ~ 12 hours.

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