Toray CFRT®Envir-Bond®



Toray Performance Materials Corporation

A Green Initiative from Toray Performance Materials Corporation

FEATURES

- > Envir-Bond® is Toray PMC's newest material innovation to improve the ease of processing at the factory level and to help reduce the amount of harmful solvents used in the building process.
- Envir-Bond® allows for direct injection of TPU, PU, and Pebax type materials, eliminating the need for additional cleaners, primers, or adhesives.
- Envir-Bond® can also be used in "Stock Fit" applications. With Envir-Bond®, there is no need for solvent based cleaners, primers, and adhesives. Water-based adhesive systems may be used.
- In-molding applications may be possible with direction on specific applications.
- The use of Envir-Bond® on an average production run of 100,000 units which involves a typical TPMC product application, would eradicate approximately 40 kg of MEK and/or equivalent type solvents.
- Envir-Bond® Sheets or components are bundled and packaged separately in plastic bags to minimize contamination and can be used directly from the bags they are shipped in.

BONDING INSTRUCTIONS FOR ENVIR-BOND® IN STOCK FITTING APPLICATIONS

- > Maintaining a clean surface is highly important to ensure good bonding.
- The surface of the material with EB® layers should be free from contaminates such as mold release, food residue, and other contaminants from fingers in handling, etc.
- Preparation of the TPMC CFRT® Envir-Bond® material for bonding is not necessary but a cleaner such as isopropyl alcohol (IPA) may be used if the surface has been contaminated.
- Excessive wiping, brushing, or pooling of cleaners, primers, and adhesives should be avoided.

WATER-BASED PRIMER APPLICATION

› Apply a thin layer of the primer with a clean brush or cloth patch using a light back and forth stroke. Heat the material with primer at 50°-60°C for the duration recommended by the adhesive manufacturer in a convection oven or heat tunnel.

WATER-BASED ADHESIVE APPLICATION

- › Apply a thin layer of the primer with a clean brush or cloth patch using a light back and forth stroke. Heat the material with primer at 50°-60°C for the duration recommended by the adhesive manufacturer in a convection oven or heat tunnel.
- Exposure to high-temperature radiant heating elements in an oven or heat tunnel should be avoided as the thermoplastic material can lose shape.
- Attach the plate with adhesive to the proper component (e.g., outsole) by applying uniform pressure over the entire surface.

Revised 07/2019

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