

Tech Tip 1

Proper Mixing & Handling of Epoxies

What > Proper Mixing
Why > Mixing and handling epoxies properly eases the application process and increases the chances of achieving a good bond.



Proper mixing and handling epoxies eases the application process and allows for the best possible performance of an adhesive.

For all filled systems, mix contents of each container (part A and part B) before being mixed together. This “premix” re-disperses any filler particles that can sometimes settle. It is also considered good practice to gently mix any one-component systems that contain fillers.

Once the products are thoroughly mixed, weigh out the appropriate amount of each into a third container using a gram scale and the recommended mix ratio found on the data sheet. A minimum of two grams of material should be used each time a product is mixed. This will ensure there is enough material for an adequate cure. Each weighing should remain within +/- 5% of the original ratio for each component. Once the components are weighed out, the product should be mixed for 1-2 minutes in a clockwise fashion and 1-2 minutes in counter-clockwise fashion. This will result in a homogeneous mixture that is ready for application.

Proper storage of the materials is also a key element to material handling. After the weighing of each component is complete, the jar threads should be wiped clean and the caps replaced. If the materials are supplied in the same type of jars, make sure not to mix the caps of the two jars. This

could cause cross-contamination and may start to cure or gel any adhesive within the lid threads, causing the jar to seal shut.

Hygiene is also very important when working with epoxies. Most EPO-TEK® epoxies are 100% solids systems, so there is no vapor coming off the material. It is still recommended to work with every material in a well ventilated area or under an exhaust hood. Latex or Nitrile gloves are also required in order to reduce any dermal exposure. Gloves should be replaced often and work spaces should be kept clean of any contaminants. Be sure to wash hands thoroughly with soap and water when finished.

For any necessary clean up of spatulas or counter tops, acetone or IPA (isopropyl alcohol) can be used with a paper towel or rag. Be sure to completely remove all solvent residue in order to avoid any contamination.

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