



## **HANDLING GUIDE FOR EPOXIES, SURFACE COATS & ADHESIVES**

### **MIXING OF EPOXIES**

The mixing of a two component epoxy material is extremely important and must be done carefully and thoroughly. The effort put into thoroughly mixing the two components will result in a material that will do what is intended. Improper or careless mixing can produce failure.

When the containers are first opened, Part A and Part B should be examined to determine if any settling has occurred. Filled liquid epoxies have a definite tendency to settle during storage or transit. This settling is not always apparent. If you suspect any settling, stir the individual components until each has a uniform consistency. This is the same precaution that is taken with any paint.

**MEASURING** of the two components must be accurate. These chemicals are designed to react completely when the proper amounts are thoroughly blended. When improper amounts of Part A and Part B are blended, the chemical reaction will be incomplete causing the material to not perform as intended. Unless specified on a product data bulletin, do not alter the specified mix ratio to alter the pot life or viscosity of the material. Measuring the components by weight using an accurate scale insures the proper ratio of Part A to Part B is achieved. Do not guess or "eyeball" measurements even when using products that provide volumetric ratio information. Measure the components by weight to establish volume levels in cartridges or other containers that may be used in handling the materials.

**BLENDING** of the two components must be done thoroughly and completely. BJB recommends a "Jiffy Mixer" for best results. "Jiffy Mixers" are available in pint, gallon and 5-gallon sizes and fit on all 1/4-3/4" power tools. Blending should take 2-3 minutes for small amounts and up to 5-10 minutes for 5-gallon size containers. Care should be taken to thoroughly scrape the sides and the bottom of the blending container. Often the method of transferring the material to a new mixing container is used. This prevents a chance of unmixed materials remaining on the sides and the bottom of the can when poured. If any doubt exists about the blend, continue mixing and scraping the sides and bottom of the container for another 2-3 minutes. Once again, examine the blended material and make sure it has a uniform consistency.

Two component epoxies are temperature sensitive. If the components are below 77° F (25°C) they will be thicker and more viscous than reported on the technical bulletin. Generally, working time will be longer and cure will require more time than reported. If the two components are above 77° F (25°C), they will be thinner and less viscous. The work time will be shorter and cure will require less time than reported on the technical bulletin.

If any filler is to be added to a liquid epoxy material, it can be done after the two components have been carefully and thoroughly mixed. The filler should be blended with the mixed epoxy long enough to wet the filler particles. No lumps or aggregate of filler should be in the mix.

## **STORAGE OF EPOXY**

Avoid extreme conditions of temperature in storage. Low temperatures will make the components thick, slower to react, and harder to blend. High temperatures will make the components thin and quicker to react. High temperatures will also accentuate settling and may cause volatilization of certain chemicals in the components.

If your epoxy components have been stored in extreme temperatures, they should be heated or cooled to 77°F (25°C) before use. The components should be examined individually before use and stirred with proper implements prior to measuring and blending.

Temperatures between 50°F and 90°F (10°C and 32°C) are considered satisfactory for storage.

The containers of Part A and Part B should always be sealed and air tight. After use, replace the lids on the containers of the components and seal them as tightly as possible. Unsealed containers will allow the components to absorb moisture from the air; especially Part B. Extensive water absorption by the components will alter the chemistry of reaction and change the properties of the cured material.

## **HANDLING OF EPOXIES**

Epoxy components are chemicals and may cause irritation. Be very careful when handling epoxies and do not get them in eyes, on skin, in hair, or on clothing. Do not breathe the vapors of either components.

When handling epoxies, wear rubber or plastic gloves. Use an apron or protective apparel. Work in a well ventilated area and wash thoroughly after handling the epoxies. When an epoxy container is emptied, replace the lid and seal it tightly; then discard the container and lid. Do not re-use them.

If either component comes in contact with skin, wash immediately with soap and water. If either component gets into the eyes, flush immediately with plenty of water for fifteen minutes and see a physician as soon as possible. If either component gets on clothing, remove the clothing and wash it before re-use. Discard contaminated shoes.