

### M-BALM & E-WOOD EPOXIES

Perma-Chink Systems sells two epoxy products, M-Balm<sup>®</sup>, a wood consolidator that hardens loose, friable wood fibers, and E-Wood<sup>®</sup>, a putty used to fill voids or cavities in logs and timbers. Both M-Balm and E-Wood are two component epoxies. Like all epoxy products, they consist of a resin and a hardener and rely on a chemical reaction between the two components to become hard. As they react they often become warm, or even hot. M-Balm, in particular, can become quite hot about 15 to 20 minutes after the two components are mixed together.

Tip: Mix M-Balm in a disposable aluminum bread pan. This allows mixed component to release heat (exothermic) and cool while preventing you from melting your mix container or bottle.

There is one thing about epoxies that you should understand: as epoxies age they lose their chemical reactivity. The older they get, the longer it may take for the combined components to become hard. If unused epoxy has been in your garage for a couple of years or more, it's not unusual for the hardening process to take three or four times longer than when using fresh product. It's not that it won't eventually harden, it's just reacts slower and takes longer.

Never change the ratio of hardener to resin to try and speed things up. Unlike other types of resin and catalyst mixtures, M-Balm MUST be mixed together at a ratio of two parts of Part A to one part of Part B by volume. For E-Wood, equal volumetric parts of Part A and Part B MUST be kneaded together for these products to work.

Tip: Mix only the amount necessary to complete each step of a small job.

Here's one more tip: M-Balm does NOT have to be cured before applying E-Wood. Epoxies do not "dry" in the sense that they must be in contact with air. They rely on chemical reactions to harden and cure, so M-Balm will harden just as rapidly under E-Wood as it will if left exposed. In fact, applying E-Wood before the M-Balm cures results in an even stronger bond to the wood.

