

# **Extending the working time for epoxy mixes.**

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Any time you use epoxy glue, resin or putty, you risk wasting whatever you don't use in time before it sets up. The larger the mass of mix that you have, the faster it will set because heat will speed up the hardening and the chemical reaction generates heat and when you have a lump of any epoxy mixture, it's own heat will accelerate its own hardening. A nifty trick to delay hardening of any epoxy mixture is to keep it cool and one technique is to use a flexible plastic bowl, spread the epoxy out thinly all over the inner surface of that bowl and then set the bowl in a bath of water and ice. The cold won't hurt the epoxy. Epoxy doesn't "dry" so spreading it thin does not bother it either. That can buy yourself useful time on big jobs, even cheat the chemistry on small jobs with 5 minute epoxy. Usually when we use 5 minute epoxy it is because we can't clamp it so we are willing to sit there and hold it for 5 minutes. Putting the 5 minute epoxy mix on ice will extend the working time while you get the pieces glued up, and then as soon as you remove it from the ice, the slowed down 5 minute clock will catch back up and set quickly. The nice thing about using a flexible plastic bowl is that few epoxies will stick to them and when the left over mix is hard you can often bend the bowl and break out the scrap, ready to mix more in a non-contaminated bowl.

**Keywords:**

Epoxy, Glues, Ice, Techniques