



# Tech Tip # 2: Handling Procedures for Premixed & Frozen Materials

Commonly, customers will purchase two component epoxies premixed and frozen in syringes for automated dispensing. Here are some quick tips on how to properly handle these materials:

1. Materials are shipped in dry ice to keep them frozen at -40°C. Once the package is received, the syringes should be moved into a freezer at -40°C.
2. When handling frozen syringes right out of the freezer, take special care to handle the product by either the needle tip or shoulder area of the syringe. Insulating gloves may also be worn to facilitate handling. Touching the barrel of a frozen syringe with no gloves on will result in the product separating from the barrel causing freeze thaw voids. This can introduce air and moisture into the epoxy.
3. Place the syringe in a test tube rack or something similar to keep the syringe stacked vertically. The shoulder end should be facing up and the needle end pointing down. **Do not place syringes on their sides.** Allow the product to thaw before use. Below are suggested thaw times:

1-3 cc	15 min
5 cc	30 min
10 cc	40-60 min

4. Once the product is thawed out, it is permissible to hold the syringe by the barrel without gloves. The product is now dispensable. If the product seems too thick, wait longer for the epoxy to thaw more before continuing with dispensing.
5. The pot life of the material should be similar to the pot life listed on the datasheet for the two component system. Bear in mind that the product needed to thaw and some of the pot life was used up in this process.
6. Do not refreeze the product in Syringe. This will cause moisture to be trapped in the syringe and can cause freeze thaw voids. The addition of air and moisture to the syringe will reduce the epoxy's usability. It is strongly suggested that the epoxy be packaged in a way that will reduce the need to refreeze product (ex: ordering 1.5 cc in a 3 cc syringe if only 1.5 cc of product is used a day).

Still have questions?

Call Technical Services at 1-978-667-3805

Or

E-mail: [techserv@epotek.com](mailto:techserv@epotek.com)

