

Technical Tip

Preparation of Embedding Mixtures

It is essential to mix the components of viscous embedding medium (Araldite + Epon replacements) very thoroughly to obtain uniform polymerization. Inadequate mixing is one of the main causes of sectioning problems with epoxy resins. The simplest way to obtain good mixing is to warm the resin, the hardener, and the containers to be used for stirring at 60°C. A uniform mixture is obtained in a few minutes by this method and no special stirring apparatus is required. The warm components also are easily poured from their containers for measurement. It is best to prepare the complete mixture just before use but if necessary it can be stored at 4°C in a bottle with a well fitting cap for several weeks, or for many months at -20°C. During infiltration of the specimens, the embedding mixture is kept at room temperature and warmed to 60°C.

CAUTION: WHEN WORKING WITH CHEMICALS IT IS WISE TO ALWAYS WEAR GLOVES AND WORK UNDER A FUME HOOD.

Reference:

Glauert, A.M. Epoxy Resins: An update on Their Selection and Use. *Microscopy and Analysis*, September 1991, pp. 15-20.