

Technical Data Sheet

EMS Petrographic Epoxy Blue Dye

EMS #1292-B

10 mg Blue Dye per 1 ml EMS Petrographic Epoxy Resin will give a light transparent blue in a 30 micron section. 20 mg/ml will give a bright transparent blue.

Mixing

1. Dispense 5 or 10 ml Resin into a mixing beaker
2. Add the Blue Dye, using the measuring ladle provided. Rather than dipping the ladle into the Blue Dye, load the ladle with a spatula, then strike off the excess with a straight edge. Used in this manner, the ladle will measure 100 ± 10 mg of Blue Dye. Rinse off the ladle with soap and tap water.
3. Heat the Resin-Blue Dye mixture on a hot plate (~100-125 C) or in an oven until the Blue Dye has dissolved. This will take 30 or more minutes, depending on the temperature of the Resin. Allow Resin to cool to room temperature before adding Curing Agent.

Impregnation

To impregnate a specimen, it is best to have at least one side flat. Dry the specimen in an oven or on a hot plate. Place a piece of aluminum foil on a piece of paper on the hot plate. Saturate the specimen with EMS Petrographic Epoxy.

Additional Tips

After impregnation, many unimpregnated voids will remain in the rock. In order that these voids are filled with dyed EMS Petrographic Epoxy in the finished thin section, it is necessary that the specimen also be mounted with dyed EMS Petrographic Epoxy. When mounting with dyed EMS Petrographic Epoxy, it is difficult to eliminate annoying background color due to the thickness of the glue line under the specimen. The following suggestions will eliminate most of the problem.

Use as small a concentration of dye as possible, consistent with the results you want. 10 mg Blue Dye per 1 ml Resin will provide a background color that is almost negligible if the specimen is flat and properly mounted, while background color with a concentration of 20 mg Blue Dye per 1 ml Resin is almost impossible to eliminate

The specimen and slide should be flat within a micron or so. The best way to ensure a flat specimen is to check it with a machinist's knife-edged straight edge. Unflat slides are another problem. For unflat slides, one can grind them using a light touch and fine abrasive, but it usually isn't worth the effort.

After applying the slide to the rock, gently work out excess EMS Petrographic Epoxy with a circular motion of the slide. Continue until a slight scraping of the slide against the rock can be felt. Cure with the slide against the hot plate.