

Technical Data Sheet

Geo-Fix Cold Mounting Embedding Kit

EMS Catalog #1257

Description

Geo-Fix is a clear two component acrylic mounting system, consisting of one powder and one liquid. Geo-Fix is a universal mounting material and ideal for filling vials up to and including 200µm. Be sure to consult the Safety Data Sheet on our EMS website.

Features

- Cures at room temperature
- Able to obtain the clearest mount when a pressure chamber is used

Mounting of Specimens

Note: Important! *Do not* pour excess liquid back into the bottle! This reduces the shelf-life significantly.

Measuring the Components

The ratio for Geo-Fix Powder:Geo-Fix Liquid is 20:12 by weight and 5:2 by volume.

Note: For reproducibility and obtaining the best mounts, weigh the amounts.

Mixing the Components

1. Measure out the amount of Geo-Fix Powder into a mixing cup (max. 60g/5x20ml).
2. Measure out the amount of Geo-Fix Liquid into a mixing cup (max. 36g/4x10ml).
3. Pour the powder into the liquid while stirring.
4. Stir thoroughly for 1½ min., without introducing air bubbles into the mixture.

Note: Polymerization of the resin begins immediately after the components are mixed. Viscosity will increase. Use the resin as soon as possible after mixing for best results.

Pretreating the Specimens

Specimens must be thoroughly cleaned and dry prior to mounting. In order to get the best possible adhesion to the specimen, make sure all surfaces are free from moisture, grease and/or other contaminants.

Mixing

1. Place the cleaned specimen in the center of the mounting cup.
2. Mix the necessary amount of resin and carefully pour over the specimen.
3. In order to ensure that no air remains trapped within cracks or cavities in the specimen, move the specimen or tap the mounting cup on the table.

Curing

Cure at room temperature. Curing time is about 20 minutes for a 30 mm diameter mount. To facilitate a clear mount without trapped air bubbles within the resin, use a pressure chamber (at approx. 2 bar). If a pressure chamber is used, it will not affect the curing time but the temperature in the chamber will normally rise during curing, especially if multiple mounts are cured at the same time. It is recommended to keep the mount in the mounting cup until the temperature is below 40°C/104°F.

After Curing

Remove from mounting cups and use mounts immediately.

For Your Information

- When mixing very small amounts (< 20g/30ml powder and 12g/12ml liquid) it may be necessary to add a few more drops of liquid to ensure a miscible mixture.

- Geo-Fix can be used with Epoxy-Dye (Cat. #1245), a fluorescent dye for easily identifying of pores and cracks, and Acrylic-Dye (Cat. #1265) for color.

Technical Data

Density	Geo-Fix Powder: 0.66g/ml Geo-Fix Liquid: 0.95g/ml
Curing	Curing time is about 20 minutes for a 30 mm diameter mount, without a specimen, at 21°C/70°F. Peak temperature: 90°C Pot life: 1½ min.
Properties after Curing	Hardness: 85 Shore D Density: 1.2g/ml