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Epo-thin Resin 0.95l, Epo-thin Hardener 0.47l AGB9187 & 8

Instructions:

Cure rate factors: Cure time will vary according to the following:

- *Quantity of resin and hardener - The greater the amount mixed the faster the reaction. A cure rate that is too rapid will result in serious defects. Recommended ratios are based on an average of 7/8" pour height using a Buehler® Sampl-Kup®*
- *Ampient temperature – The higher the temperature, the faster the cure but the greater the possibility of serious defects occurring during curing.*
- *Air circulation - Poor air circulation leads to faster curing rates while good air circulation will retard curing and prevent an excessively rapid cure rate.*
- *Sample mass and heat conductivity – Larger metallic samples will act as neat sinks and retard curing. Smaller samples or those having poor heat conductivity will have little effect on the cure rate.*
- *Mould material – Metallic moulds will retard the cure rate while non-metallic moulds such as Sampl-Kup® increase the rate of curing.*

Curing times:

- *Room temperature curing: With optimum conditions, 21-24°C (70-75°F) correctly mixed resin will cure in 18 hours.*
- *Forced curing: Mounts may be cured in 3-4 hours at 32-38°C (90-100°F)*

Proportioning: Epo-Thin® components must be accurately proportioned by weight to assure optimum results.

- *Ratio by weight: 100 parts resin to 36 parts hardener.*

Moulds: Any type mould may be used to cast Epo-Thin® but the mould faces of all moulds except Buehler® reusable rubber mounting cups should be coated with number 20-8185 Buehler® mould release first.

Cleaning: Samples must be thoroughly cleaned and dried before casting.

Mixing: Thorough blending of Epo-Thin® components is very important. At lease one minute blending time is recommended. For best results, tilt the cup containing the resin and hardener and gently work the two liquids together by lifting the liquids from the bottom to top until blending is complete. When bubbles have dissipated from the resin/hardener mixture, cast the mixture into the mould. To preserve the pore walls of porous materials, vacuum impregnate with Epo-Thin® to prevent pore walls from collapsing and to prevent the entrapment of polishing debris. To lower the viscosity of the Epo-Thin® mixture for more effective impregnation, warm the resin to 32-38°C (90-100°F) before mixing. Fill mould to desired level with mixture.