

These instructions provide an introduction to the general technique of casting with polyester casting resin. Important phases of resin craft, such as catalyzing the resin, colouring with transparent dyes or opaque pigments are covered. With a little desire and imagination, you will be into a hobby that will give you hours of enjoyment creating lovely items for your home or gifts for friends and family.

## Catalyzing or Curing Casting Resin

Many factors influence the speed of resin gel or cure. Most important of these are:

- amount of resin used
- temperature of the room
- temperature of the resin
- temperature of the mould
- additives, such as dyes, colour pigments, pearl pigments and other types of embedment's

There is an optimum amount of catalyst for each type of project. In all cases, refer to catalyzing instructions on the label. Catalyst (hardener) starts a chemical reaction that creates an exotherm (heat) which cures the resin. An excessive amount of catalyst will overheat the casting, causing crystallization and fractures.

Thicker pours require less catalyst because a thick casting retains heat. A thin section dissipates the heat requiring more catalyst.

Room temperature, resin temperature and the temperature of the mould affect gel time. (The higher the temperature, the faster the gel.) Too fast a cure will cause fractures. The high heat of the fast cure also causes excessive warping and fading of colours.

Humidity slows the cure of resin. Moisture in the resin, which may come from humidity in the air or from temperature present in embedments, can cause the resin or casting to be cloudy.

Keep the can of resin capped tightly when not in use.

**Important:** Always mix the resin and catalyst very thoroughly. As a rule of thumb, mix for 60 seconds. When mixing, use care to scrape the sides and bottom of the container.

**Danger** - Catalyst is *Methyl Ethyl Ketone Peroxide*. Combustible. Causes severe burns. May be fatal if swallowed. Keep from heat or open flame. Avoid contact with skin, eyes and mucous membranes. In case of skin contact, flush thoroughly with water. For eyes, get prompt medical attention. If swallowed, give large quantities of water or milk. Obtain medical attention immediately. *Keep out of reach of children.* 

## **Colouring Casting Resins**

Use our range of transparent pigments for transparent colours in your castings. Add pigment to resin before adding the catalyst for thorough dispersion and resistance to fading from the catalyst reaction. The pigment is concentrated, so use sparingly until you obtain the desired shade.

DO

- **DO** read the label instructions.
- DO add proper amounts of catalyst and stir thoroughly.
- DO use a proper mould release, when required, in a mould.
- DO keep detergent and acetone handy for clean-up.
- DO work in a well ventilated room, approximately 70°F.
- DO use clean, dry moulds.

## DON'T

- DON'T add catalyst to more resin than you will pour within 10 20 minutes.
- DON'T pour catalyzed resin back into the can.
- DON'T work with resin or catalyst around food.
- DON'T pour excess resin into the sink, it will clog the drain.
- DON'T disturb the casting until it is thoroughly cured.
- DON'T make a second pour until the first has gelled.

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