

Water Clear Casting Resin – Basic Instructions

Our Water Clear casting resin is a clear low exothermic casting polyester used for solid castings, embedments and for thick coatings on table and bar tops. This resin contains no wax which allows seamless multiple layers to be poured.

In order to gain experience casting we recommend utilizing simple plastic containers like Tupperware or the plastic polyjars available from our webstore as moulds. These containers do not require any mould release.

Start small and practice controlling cure time and exotherm (heat) by adjusting the amount of catalyst.

For embedment's, pour a shallow layer of resin and let it gel then add the items you've chosen to embed and pour the mould full, let it cure, demould and check your results. It is important to pour each layer before the previous layer cures completely. This is because casting resin shrinks as it cures, and pulls away from the sides of the mould. If you pour a layer after this happens, the new material will flow down the sides and partially encapsulate the prior pour.

Excessive exotherm can result in resin shrinkage and cracking, and discoloration. Exotherm can be controlled by adjusting the amount of catalyst used, the volume or thickness of resin poured and ambient temperature. Follow the instructions on the resin can as a guide then adjust based on your experience and working conditions. The best results are obtained by minimizing exotherm while allowing the resin to cure to the proper hardness.

Custom made moulds of TAP urethane, latex and silicone mould making materials can be used to duplicate original objects such as figurines, plaques or other art objects are excellent for use with this resin. A rubber mould can act as a heat sink, this heat sink can create a sticky textured finish caused by the lack of exotherm on the surface of the casting. Preheating of the mould to 125 degrees F prior to casting will help alleviate this condition.





Put embedments in place face down



The variety of objects that can be embedded in castings is limited only by one's imagination. However, many objects require some preparation prior to embedding. Porous materials will most likely vent air bubbles when submerged in resin. Sealing the surface with a coat of water clear resin and allowing it to cure before casting will usually eliminate air bubbles. If the object will float it must be glued down using water clear resin in small quantities. Allow the resin to cure before continuing with the remainder of the casting. Materials that are dyed or painted should be tested for colour fastness before casting embedding, as the colour may bleed into the casting. Photographs, fabrics, paintings, prints and similar materials should be tested for compatibility with this resin before casting.

Opaque and translucent casting of various colors can be achieved using our range of translucent polyester pigments available from our webstore. When adding pigment to water clear resin use only enough to make the liquid opaque to create the desired effect. Too much pigment can retard the curing process altogether so use it sparingly. Very thin layers cannot be made completely opaque without inhibiting the cure.