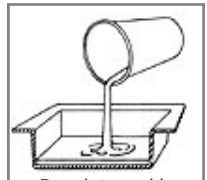
Tips for using Clear-Lite Casting Resin

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

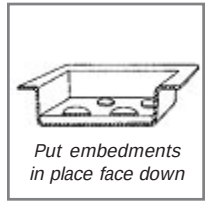
In order to gain experience casting we recommend utilizing simple plastic containers like Tupperware as molds.



Pour into mold

These containers do not require any mold release. Start small and practice controlling cure time and exotherm (heat) by adjusting the amount of catalyst.

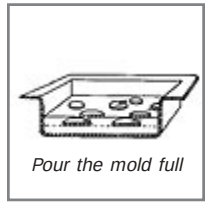
For embedments, pour a shallow layer of resin and let it gel then add the items you've chosen to embed and pour the mold full, let it cure, demold and check your results. It is important to pour each layer before the previous layer cures completely. This is because casting resin shrinks as it cures,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



Put embedments in place face down

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 Clear-Lite 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 molds of TAP urethane, latex and silicone mold making materials can be used to duplicate original objects such as figurines, plaques or other art objects are excellent for use with Clear-Lite. A rubber mold 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 mold to 125 degrees F prior to casting will help alleviate this condition.



Pour the mold full

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 Clear-Lite and allowing it to cure before casting will usually eliminate air bubbles. If the object will float it must be glued down using Clear-Lite 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 color fastness before casting embedding, as the color may bleed into the casting. Photographs, fabrics, paintings, prints and similar materials should be tested for compatibility with Clear-Lite resin before casting. Many items can often be sealed with Ultra Seal.

Opaque and translucent casting of various colors can be achieved using TAP Pigment and Dyes. When adding pigment to Clear-Lite 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.

For flat castings such as tabletops multiple pours and the addition of embedments can be employed. For the last pour of Clear-Lite add TAP Surface Curing Agent or cover the wet resin with 5 mil thick polyester film (Mylar). Mylar film or curing agent allows the resin to cure in the absence of air permitting Clear-Lite to cure with a hard high gloss finish. The mylar will impart a high gloss finish, however, Surface Curing Agent can produce a slightly hazy surface caused by the wax it contains. The thinner the layer, the less visible the haze will be. The haze can be minimized by buffed away buffing using rubbing or polishing compound after it has fully cured. The entire surface will most likely need to be sanded flat since polyester resin tends to cure with some ripple effect on the surface.