

**PRODUCT BULLETIN**  
**How to use**  
**TAP Clear-Lite**  
**Casting Resin**

**4**

- Use slightly more catalyst. You will need to experiment here. Too much catalyst can cause excessive heat.
- Keep the mold/resin warm during the cure. Working in a cold setting such as an unheated garage is detrimental.
- Leave the casting in the mold until it is fully cured. If you take it out early, do not put it back in the mold.

If the part is still tacky after removal from the mold, heat can create a full cure. Place the part in a warm location, (inside a box set in the sun for example). If there is not a good initial cure, full cure may take several days.

*Because we have no control over working conditions or methods, products should be tested to establish suitability for your individual application. Our liability is limited to the price of product.*



- **Crystal Clear**
- **UV Stable**
- **Small or Large Casting**
- **Embedments**

**TAP Clear-Lite Casting Resin**

Clear-Lite casting resin is a clear low exotherm casting polyester used for solid castings and embedments. Clear-Lite is noted for its clarity and ability to be cast in mass. In its liquid form, casting resin has a consistency of corn syrup and a slight color ranging from straw to light aqua. It cures (hardens) with the addition of MEKP Catalyst. During the hardening process the slight color disappears and the resin becomes crystal clear.

The styrene odor of casting resin is less objectionable if you have good ventilation when pouring. Once cured, your cast pieces will have little if any odor. Casting resin should be stored at room temperature (72° F), out of direct sunlight, and out of reach of children. TAP Clear-Lite Casting Resin is designed to cure bubble free and is UV stabilized.

Using casting resin is more art than science. The information in this product bulletin is only a guideline. Most projects require experimentation to obtain final desired results. Start small to learn the behavior of casting resin before attempting a large project.

Clear-Lite Resin can be used to cast table tops with or without embedments. Casting Resin does not cure to a self-leveled finish. The top may require sanding and buffing or the use of mylar to create a perfectly level smooth surface. Ultra-Glo is another option for table tops.

**Using Catalyst**

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 mold
- additives, such as dyes, pigments, and embedments

There is an optimum amount of catalyst for each type of project. In all cases, refer to catalyzing instructions on the label. Never mix more resin/catalyst than can be poured in 10-20 minutes.

Catalyst (hardener) starts a chemical reaction that creates heat which cures the resin. An excessive amount of catalyst will overheat the casting, possibly causing 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 mold 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 colors.

Humidity slows the cure of resin. Moisture in the resin, which may come from humidity in the air or from 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.

**How Much Catalyst to Use**

This chart is intended as an approximate guide only, and is expressed in drops of catalyst per ounce of resin. It is based on a room temperature of 70°-75° F. For warmer temperatures, decrease catalyst by a drop per ounce of resin; for cooler temperatures, increase the amount of catalyst by a drop per ounce of resin. It may be necessary to experiment to determine the correct amount of catalyst for your specific conditions.

- When using small molds, use the higher numbers of drops of catalyst recommended. When using larger molds (over 1/2" thick), use the lower number of drops of catalyst recommended.
- If pouring more than five layers, keep in mind that each catalyzed layer adds to the build-up of the heat

during the curing process. You'll need to experiment to determine the number of drops of catalyst for each layer that will allow a good, hard cure without fracturing around embedments. Castings over 1/2" thick generate excessive heat. Experiment first with reduced catalyst to prevent cracking and over heating.

SINGLE-LAYER POUR	
Layer Depth	Drops of Catalyst Per Oz. of Resin
1/8"	12 -15
1/4"	8
1/2"	6
3/4"	5
1" - 1-1/2"	4

MULTIPLE LAYER POUR*	
Layer	Drops of Catalyst Per Oz. of Resin
1st Layer	4-5
2nd Layer	3-4
3rd Layer	2-3
4th Layer	1-2
5th Layer	1

**Adding Color**

Use TAP Dyes for transparent colors. Add dye to resin before adding the catalyst. The dye is concentrated, so use sparingly until you obtain the desired shade. One drop of **TAP Transparent Dye** per ounce will create a light shade; three drops per ounce will generally make quite a dark shade. Stir thoroughly. Use **TAP Premium Opaque Pigments** for opaque castings. Color Pigment is most thoroughly dispersed by mixing in a small amount of resin, such as 1/4 ounce color pigment to one ounce of resin. Then disburse the concentrated mixture into the balance of your resin.

For veins or streaks of color, add three drops of catalyst to 1/4 oz. of color concentrated resin mixture. Add this mixture slowly to the resin casting, stirring only slightly. Pour slowly into the mold

Always add the dye or pigment before catalyst. This will give you time to obtain the desired shade. After reaching the desired shade, add the catalyst. Do a little experi-

*(See back)*



- ☐ **Bellevue WA** 12021 NE Northup Way 425 861-0940
- ☐ **El Cerrito CA** 10760 San Pablo Avenue 510 525-3508
- ☐ **Fremont CA** 5160 Mowry Avenue 510 796-3550
- ☐ **Lynnwood WA** 4232 196th St. SW 425 977-4440
- ☐ **Mountain View CA** 312 Castro Street 650 962-8430
- ☐ **Pleasant Hill CA** 1478 Contra Costa Blvd 925 798-0420
- ☐ **Pleasanton CA** 6010-C Johnson Drive 925 460-8214
- ☐ **Portland OR** 2842 NE Sandy Blvd 503 230-0770
- ☐ **Sacramento CA** 4538 Auburn Blvd 916 481-7584
- ☐ **Sacramento CA** 4506 Florin Road 916 429-9551
- ☐ **San Francisco CA** 154 S. Van Ness Ave 415 864-7360
- ☐ **San Jose CA** 1212 The Alameda 408 292-8685
- ☐ **San Jose CA** 1008 Blossom Hill Rd 408 265-6400
- ☐ **San Leandro CA** 3011 Alvarado Street 510 357-3755
- ☐ **San Mateo CA** 606 South B Street 650 344-7127
- ☐ **San Rafael CA** 900 Andersen Drive 415 454-6393
- ☐ **Santa Rosa CA** 2770 B Santa Rosa Ave 707 544-5772
- ☐ **Seattle WA** 710 9th Avenue North 206 389-5900
- ☐ **Stockton CA** 1859 Pacific Avenue 209 937-9300
- ☐ **Tigard OR** 15957 SW 72nd Avenue 503 620-4960

Corporate Office • San Leandro CA • (510) 895-8249

**TAP Plastics • the fantastic plastic place**  
 Visit or shop online: **tapplastics.com**