COOL TOOLS

How to Make Daylight Photopolymer Texture Plates

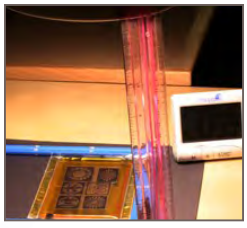
With liquid photopolymer packets, making custom textures for metal clay, jewelry, and paper crafts is easier than ever. In less than 30 minutes you'll have a custom stamp. The kit includes the frame, photopolymer packets, gloves, a washout brush, thin weight "negative" paper and a plastic storage box that doubles as a small tray. Before you make your first photopolymer plate, please read these instructions through completely and assemble all the necessary equipment. Do not remove the liquid photopolymer packet from the black box until required, it is very light sensitive and can be ruined if exposed to the light for more than a few seconds. Keep the box closed at all times. Only open to quickly remove the photopolymer packet at the moment it is needed. Close the box immediately and assure that no light can leak in.

Exposure Station Setup / Wash Station Setup			
60 Watt bulb	Black background (sheet of paper)	Liquid dish soap (blue Dawn)	Unopened Black Photopolymer Box and a Small Tray (larger than the photopolymer frame)
Task arm lamp	Scissors	Artwork, prepared as a negative on transparency or vellum paper	Timer with a second hand
Washout brush	Photopolymer frame	Nitrile gloves	

Ideally, the exposure and wash stations should be next to each other in a totally dark room with a red photo light (a nearly dark room will work as well). If the Exposure Station and Wash Station are more than a few feet from each other, have a black cloth handy to wrap the packet in during transport to the wash station.

1. Prepare the 60 Watt Bulb and Task Arm Lamp

Make photopolymer plates in a room without a lot of light. I usually turn off the overhead lighting when I am making my plates. Place the black card (supplied) on your work surface. Position a height-adjustable task lamp with a 60-Watt clear, pearl or daylight bulb, 20cm (8") above the card, shining directly downwards, and turn it on. Do not use lamps with shades.



2. Assemble Liquid Photopolymer Packet and Artwork in Clamp

Open the clamp by sliding the two sides apart at a corner. One side has colored strips on it; place your negative artwork face up in the middle. Set the timer for 2 minutes. Take a liquid photopolymer packet from the black light-proof box and place on top of artwork, closing the lid of the box right away. Place the other side of the clamp on top; the magnets should click together. Press down firmly in the middle to ensure it's free from creases.

3. Two Minute Floor Hardening

Place the clamp under the lamp; at this stage the liquid photopolymer packet will be on top of the artwork. Start your timer and at the end of the two minutes turn the clamp over immediately and ensure that the lamp remains at the same height above the middle of the clamp.

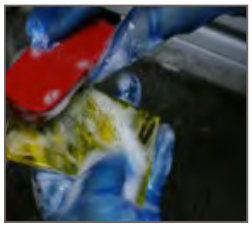
COOL TOOLS

4. 10 Minute Face Hardening

Set your timer for 10 minutes, (for very fine lines increase to 13 minutes). The back of the artwork should now be on top. Start the timer. At the end of the time, turn off the light. In the dark, remove the clamp from under the light and transfer it to the sink area, ensure that it is kept in the dark during transport because the gel will continue to harden in light.

5. Cut Around the Liquid Photopolymer Packet with Scissors

Put on your gloves. Remove the liquid photopolymer packet from the clamp, remembering which side was next to the artwork. Over the sink, cut around the liquid photopolymer packet. If using a knife cut the outer layer of plastic only, on the side that was next to the negative. The plastic side that was next to the artwork will come away easily, leaving the other sheet of plastic still attached.



6. Wash All the Liquid Gel from the Photopolymer Plate

Run cold water over the photopolymer plate to remove most of the liquid gel. Squirt some dishwashing liquid (we love Blue Dawn!) onto the photopolymer plate and brush it gently in a circular motion until all the liquid gel has been washed off. Remember that you want to minimize the light that gets to the plate as you clean it. Work quickly, but be gentle so you do not scrub off the still-soft photopolymer. Rinse the photopolymer plate and check that it is clean. Take care in doing this as the photopolymer plate has not yet fully hardened.

7. Final Hardening Process

Place your photopolymer plate, face up, in the tray and cover with water. Place the tray under the lamp. Lower the lamp so that it is just above the water. Please ensure that the lamp does not come into contact with water. Leave the lamp in this position for 10 to 15 minutes. During this time you will see the photopolymer plate turn pale yellow and it will also harden.

8. Dry Your Photopolymer Plate and Attach It to a Mount

Remove the photopolymer plate from the water, dry it and trim it to size. To dry I gently pat the stamp with a towel. I try not to use a paper towel, as the paper may stick to the stamp. Peel off the plastic from the back of the photopolymer plate. The plate will adhere very well to acrylic for temporarily mounting during use. Be careful not to stretch the photopolymer plate when applying it to a mount as it may distort the image. I replace the clear backing each time to ensure the back of the stamp stays sticky. Photopolymer plates can be re-applied many times.

COOL TOOLS

Troubleshooting

If the process does not work, the first thing to do is determine where you went wrong. Most problems are either that the entire plate is solid or that the plate did not solidify completely. Below find and explanation of what went wrong and how to fix it.

Solid Photopolymer Plates

Either your artwork is letting through light or you have exposed it too long. Check that your artwork is dark black by comparing against a photopolymer plate made using the artwork supplied. If your artwork is at fault, print in black ink, increase the ink volume and select photo paper matte or similar. If the gel packet has had too much light, ensure that you have not made the photopolymer plate in a sunny room, delayed in washing it out or not washed it out thoroughly. If you have done this then reduce first exposure time by 30 secs and the second by 2 mins.

Liquid Photopolymer Plates

Either the gel packet and the clamp are very cold or the light is not powerful enough. Increase first exposure time by 30 secs and the second by 2 minutes.

Lamp Options

If your bulb does not say "60 watts" on it, the it is the wrong type for this kind of photopolymer. (See photo in Step 1 for the right type of bulb. You cannot use an energy saver bulb, any type of coiled fluorescent bulb, or UV light source (we also carry UV Photopolymer, which are pink instead of yellow).

Use only a 60-watt incandescent bulb. This is the old fashioned bulb with a filament.