How To Make Custom Photopolymer Texture Plates

With liquid photopolymer packets, making custom textures for jewelry and crafts is easier than ever. 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.

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<th>Exposure Station Setup</th>
<th>Wash Station Setup</th>
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<td>Washout brush</td>
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<tr>
<td>Black background card</td>
<td>Scissors</td>
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<tr>
<td>Photopolymer frame</td>
<td>Liquid dish soap</td>
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<td>Artwork, prepared as a negative</td>
<td>Nitrile gloves</td>
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<tr>
<td>Unopened Black Photopolymer Box</td>
<td>A small tray (larger than the photopolymer frame)</td>
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<td>Timer with a second hand</td>
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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.

**Step 1: Prepare the 60 Watt lamp**

Make photopolymer plates in a room without a lot of light. Place the black card (supplied) on your work surface. Position a height adjustable 60-Watt lamp, with a clear, pearl or daylight bulb, 20cm (8”) above the card, shining directly downwards, and turn it on. Avoid lamps with narrow shades. Consult the end of the instructions for suggested times if using energy saver bulbs.
**Step 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 again. 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.

**Step 3: Two minute hardening**

Place the clamp under the lamp; at this stage the liquid photopolymer packet will be on top of the artwork (as shown in the image to the right). 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.

**Step 4: 10 minute 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 (as shown). 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.

**Step 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.
### Step 6: Wash all the liquid gel from the photopolymer plate

Run warm water over the photopolymer plate to remove most of the liquid gel. Squirt some dishwashing liquid 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 nearly-hardened 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.

### Step 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.

### Step 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. 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. Photopolymer plates can be re-applied many times. You can use this plate for custom rubber stamps, metal clay, polymer clay and traditional clay textures and to stamp resists for etching.
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 an 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 much light. 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 1st exposure time by 30 secs and 2nd by 2 mins.

**Liquid photopolymer plates** - Either the gel packet and the clamp are very cold or the light is not powerful enough. Increase 1st exposure time by 30 secs and 2nd time by 2 mins.

Lamp Options

All lamps will harden the photopolymer plate-making gel, but may take different times. If you are unsure about the type of light you have try a small packet and adjust from there. Here is a reference for the typical times for different bulbs. Use these as a basis for your experimenting.

<table>
<thead>
<tr>
<th>Energy saving</th>
<th>Equivalent to</th>
<th>First hardening</th>
<th>Second hardening</th>
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<tr>
<td>7 Watt</td>
<td>25 Watt</td>
<td>5 mins</td>
<td>30 mins</td>
</tr>
<tr>
<td>11 Watt</td>
<td>40 Watt</td>
<td>2 mins 30 secs</td>
<td>15 mins</td>
</tr>
<tr>
<td>14 Watt</td>
<td>60 Watt</td>
<td>2 mins</td>
<td>10 mins</td>
</tr>
<tr>
<td>18 Watt</td>
<td>100 Watt</td>
<td>1 min 30 secs</td>
<td>8 mins</td>
</tr>
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Creating your own artwork

To create artwork for your custom textures and stamps, make an inverted version of your artwork. It doesn’t have to be reversed, it just needs to be white on black rather than black on white.

Your kit includes a few sheets of lightweight paper. Vellum is the name of this type of paper. You can draw directly on this paper using opaque black ink or you can print directly on the vellum using your laser or ink jet printer.
For text photopolymer plates use Microsoft Word, insert a text box, format the box color to black, change the font to white, leave a black border around it and print.

Line drawings work best for this process. The lines should be no less than the thickness of a regular ball point pen, or if you are familiar with line weights, 1 point. The easiest way to create a negative for this type of artwork is to scan the image into your computer and invert it in your photo editing software. Then simply print it to vellum or to a transparency.

You can use a software program such as Corel, Photoshop, or Illustrator. These types of programs provide many different filters for modifying photographs. If you do not have any of these, you can also download free software such as http://www.gimp.net.

Artwork must be solid black ink that stops light, with the blacks and whites reversed (in negative). If the black looks grey or speckled with white flecks then do not use it. Ensure there is a 5mm (1/4") black border around your design. Print on the paper supplied. To ensure your negative is solid black, print in Black (or greyscale) not Color, select Photo paper matte instead of transparency, increase the ink volume, do not print on Best setting. All printers vary, to find your optimal paper setting print small boxes using different paper settings, e.g. plain, photo or brochure paper and choose the darkest. For photographs increase the first time to 2 minutes 30 seconds.

**Printing your image on paper**

We recommend that you print on the 45gsm paper supplied, alternatively you can choose thin paper of 60gsm or less (tracing paper).

**Printing your image on ink jet film**

If your image has very fine detail, use **imageblack ink jet film**. Load imageblack ink jet film to print on the coated side (it’s slightly rough and will stick to a wet finger!). Check that the black areas of your artwork stop light by looking though it against a light. Most problems are caused by artwork that lets light through. Contact us for laser printer information. You can touch up your artwork with a permanent pen, print it twice or overlay two sheets and stick with glue stick to make it darker black. You can make any image at all into an liquid photopolymer packet photopolymer plate as long as it is tonally light and dark, just ensure you do not infringe copyright.
Card making

You can make photopolymer plates for enhancing your card making and really personalise a birthday or celebration card. You can use any inks on the photopolymer plates (solvent based ones such as Stazon will eventually distort the photopolymer plate a little). You can use embossing pads and heat emboss your design which is very effective for wedding invitations etc.

Jewelry

Custom photopolymer plates will allow you to explore your own designs in textures and custom components. Make your own signature stamps, your own line of components. Be sure to use Cool Slip on your texture plates before using them with metal clays. The plates can be washed with soap and water between different types of clays.

Scrapbooking

If you are scrapbooking, text or photograph photopolymer plates can replicate a particular aspect of the photographs and add a personalised and very special feel to the page. The most effective photographs are generally cropped to just the face, as backgrounds and bodies are often not interesting to photopolymer plate out.

Ceramics and pottery can be made truly original, children's drawings or artistic designs can be printed on plates, mugs, crockery etc. Photopolymer plate on any fabrics, cushion covers, scarves or jeans with washable inks. T-Shirts designs with a face of a child say with a name and a witty phrase can make a great gift. Liquid photopolymer packet photopolymer plates can be used to make a photopolymer plate wherever it would be impossible to transfer ink using a printer, such as a model trains and aeroplanes, clocks. You can make your own photopolymer plates for letterboxing or children's parties, either to personalise the invitation or as part of the party gifts. You can make photopolymer plates as part of a treasure hunt or get the children to draw their names and make photopolymer plates of them for tags and place names.