

User guide

Product description

Imagepac are pre-packaged sachets of liquid photopolymer resin providing you with the final product to make a stamp with, in one easy to use pack. It's a better way to manufacture stamps, giving you all the benefits of using polymer without the drawbacks. It is now no longer necessary to construct a polymer plate out of the four components (substrate, damming tape, coverlay and resin) you can do all of that by just taking the sachet out of the box!

imagepac is patented in the UK under GB2372575, in the US under 09/985034 and in Europe under 02 755 145.6.

The negative

Create your design in a software program and directly print it on an inkjet or laser printer on imageblack film.

If your negative is smaller than the lower exposure glass then light will come up around it and bounce off the machine and the upper glass to fill in the floor, in particular at the edges, leading to an uneven or filled in floor. Avoid this happening by blacking-off around the negative. Lay a masking template around your negative to make it the same size as the lower glass. Otherwise, A8 will produce a much larger floor than A4 with the same exposure times. Using the masking template means that now all the sizes will expose the same.

To check the quality of your negative, hold it up to the light and see if you can see light through the black parts, or use a densitometer to accurately measure it- a figure of 1.8 is the absolute minimum to work with, but a figure of above 3.0 is desirable. If you can see through the negative, then it is almost certain that the plate will be of poor quality as well (although UV-transmitting and daylight-transmitting are not always the same). If your negative lets light through then you may be able to use it, but you will have reduce the amount of time on the 2nd exposure to a minimum, poor negatives can make good plates with the minimum main exposure time through the negative, after that the plate will fill in. The plate quality will ultimately only be as good as the quality of the negative.

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Exposing imagepac

The 1st exposure time will make the floor or support, the 2nd will make the detail by shining light through the negative.

If you are using your exposure machine for the first time that day, warm the bulbs up for three minutes before exposing. The critical time in plate making is the 1st or back exposure. Bulbs give out much more light when hot; the back exposure is done first and is the shortest, so cold bulbs have the largest effect on the depth of floor. A small variance in the 1st exposure time has a much greater effect than a similar change in the 2nd exposure. Cold bulbs often give low plate floors which lead to wobbly lines or text falling off.

Use spacers (bearers) to ensure even compression. These should be the imagepac thickness that you are using plus the negative thickness (usually 0.15mm) and the front film (0.06mm). For a 2.3mm (90") thick imagepac use 2.4 - 2.5mm spacers. For a 2.55mm imagepac (100") use 2.7 - 2.8mm spacers.

Ensure that the glass bed is clean and dry. The negative should be dry and with the black dark enough density to stop UV. Lay your imagepac sachet on the negative, making sure that you can read the printed "imagepac" on the edge of the sachet. Close your exposure unit. The upper glass should exert enough pressure to remove all wrinkles and flatten the sachet. If you are using your existing exposure unit then you should use the same exposure times as you were using with liquid resin.

Different exposure units have different light configurations producing different light intensities, also, as bulbs age they produce less light, often less evenly distributed down the tube. For these reasons it is not possible to state exact times to expose a perfect imagepac on every machine. As a rough estimate try 20 seconds and 300 seconds as your first test.











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This method will help you set the exposure times accurately when you use imagepac. It will also help you perfect plate quality if you are finding it difficult to hold fine relief or you are filling in fine reverses.

Set your current back exposure time, to save cost you can use A7, A8 or A9 sized sachets, lay the sachet on the negative on your exposure unit with 'imagepac' readable. Black-off completely around the negative. Expose the sachet for 30 seconds on the back only- do not use the main exposure. Remove the sachet, cut the front plastic with a scalpel not scissors, and wash it gently as it will be delicate without relief. Measure the floor, aim for a floor depth that is just under half the total plate thickness (35-45% is ideal). Adjust this time accordingly to achieve the desired floor thickness, this is your correct back exposure time.

Now calculate the main exposure time, if you only have one set of bulbs or the upper and lower lights are the same, then the main exposure will be, as a rule of thumb, about 8 x the back exposure time you have just set. Use a negative that has fine relief and reverse on it. Ideally, use a specially made test negative. Place the negative on the unit and the sachet on top of it, imagepac readable. Expose for the floor exposure time that you have just set, then expose for the main exposure time through the negative for 8 x that time.

In some cases you should adjust your main and back exposure according to your artwork. Calculating the correct main exposure time depends upon how deep the floor is, how much of the negative is black and the fineness of the artwork. Remove the sachet and without cutting it open, press it between your finger and thumb. The relief should be firm to the touch surrounded by liquid resin.

If the plate is under-exposed the relief will not be attached to the floor. In this case if you squeeze the sachet, the text will move freely in the resin. To rectify this increase the main exposure time by 30 seconds and repeat the process until the text holds. If the plate is over-exposed, the pools of liquid resin will be shallow or non-existent and the fine reverses will have filled in. The plate will feel rigid with very little liquid resin present. To rectify this, decrease the main exposure time by 30 seconds and repeat the process until the text is surrounded by liquid resin. When you have perfected the main exposure time, wash this plate out, post-expose it and check that you are happy with the fine reverses and reliefs in detail using an eye glass.







Summary

- Ensure you have a dark black negative.
- Hold the sachet by its seam, never its middle- this avoids creasing it.
- Make sure the sachet is at least 7mm (3/8") larger than the text in the negative to avoid the curvature at the sachet edge ruining your plate.
- Use correct depth of bearers; plates must always be flat- uneven plates produce uneven relief.
- When compressed, ensure sachet is free from creases.
- Place imagepac down so that the printed 'imagepac' is readable. The flexible side will always be next to the negative.
- Always mask off around the negative with light-stopping material.
- Use a back exposure time to achieve about 40% floor.
- Use a main exposure time that holds fine relief while not closing fine reverse.
- If you are trying to hold very fine relief then you can increase the floor to about 60% of the total plate thickness as this makes it easier to hold fine relief.



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Processing imagepac

You need to cut the imagepac open to reveal the liquid resin. You can either cut the border off with scissors or the preferred method which provides greater support, is to cut the plastic front out with a scalpel. Place the imagepac on a flat surface, with the side with the text in reverse, facing up. Cut through the outer film only, around all four sides, just in from the seal.

Open the wash out unit lid and ensure the sticky green base plate is dry. You can use a squeegee to dry it quickly. Stick the sachet to the base plate with the cut side facing you, press the edges down firmly and peel off the cut piece of plastic.

Ensure that you have added the correct concentration of wash out developer (typically 2% of volume) to the water bath. An ideal water temperature is 40C. Wash out for 1-2 minutes, remove the plate and rinse it, check it is clean before going any further. Do not leave the stamp in water for too long or it will go white. Do not leave the lid down on the brushes or they can leave impressions in them. Do not cut the stamp floor when you cut the outer sheet of plastic as water will get in behind the polymer and swell it.

To make your stamp sheets really shiny, dry the sheet fully before post exposing.

You now need to post expose the stamps to finish the curing. If you wish to ensure a completely dry tack-free printing surface then dissolve a teaspoon of imagepac de-tac salts in the post exposure water, this will may the stamp a slightly chalky appearance so it is not advisable for craft stamps.

If using imagepac, leave the rear side of the plastic on to get a naturally sticky back, remove this if you want a dry back to your stamps. Germicidal post exposure light will give a very dry surface finish, alternatively you can use a tray of water in sunlight.

Rinse and dry before applying to a self-inker or sticking to a printed acetate.

imagepac can be stretched, so take care when applying. You can apply tape to the back of the imagepac plate, lay the plate face down on a clean smooth surface, then apply the tape to the back of it in a sweeping motion to avoid air bubbles.

Alternatively, attach one edge of the plate to the adhesive stamp base and let the rest fall into place or lay the plate face down and lower the adhesive stamp mount down onto it.









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