

Technical support

Document name:

Exposing PhotoMask™ film

Contents:

Precautions / Laser printers / Film positives / Tips for exposure

Exposing PhotoMask™

PhotoPolymer resist works by ultra violet light hardening the emulsion. So when you lay back artwork over the film you protect that area from exposure to UV light and it stays soft. If you were to take a piece of film out of it's bag and just wash it without exposing it the blue emulsion would just wash away and you would be left with only the protective cover sheet. So the areas not covered by artwork go hard during the exposure process and the areas that are covered stay water-soluble. That's simply how it works.



A few precautions about SR2000 PhotoMask Resist

- Never expose the film to direct sunlight. This will ruin the film. Do your exposure in a room that has no direct sunlight in it. Cover windows with a good cover.
- When you go off to wash the resist out don't walk past direct sunlight or you'll ruin the film on the way. Also make sure you wash out area has no direct sunlight. Once the wash out has occurred it doesn't matter about sunlight getting onto the resist.
- You can have normal fluorescent or standard light bulbs on in the room that you

are exposing. These won't effect the resist unless you leave it out for long periods of time.

- We recommend you keep your resist in a light safe place and don't leave it exposed lying around the bench.
- Don't let the resist get damp.

Laser Printers

- Most Laser printers will do the job ok. We have always found that Hewlett Packard and Canon are very good choices. See our range of Laser Printers in the Equipment section of this site.
- Set your Laser printer to darkest setting and take off the economy mode. This will provide you with your darkest print.



Film Positives

A Print Bureau will create clear lithograph film to use as your artwork for the absolute ultimate result. No light whatsoever gets through, making the wash out extremely fast. Not really practical for general work but if you have a huge job on that requires lots of washing out then it may be worthwhile having a film Lithographic film positive made up.

Tips for exposure

- Make sure your acrylic cylinder on the Letralite is kept clean.
- Lay the resist emulsion side (dull side) up and the artwork onto it emulsion side (laser toner side) down. Expose through the vellum artwork.
- For 3 – 5mil resist the Letralite should be set to 30 secs for the correct exposure
- For 6 – 9 mil resist the Letralite should be set to 45 sec for the correct exposure
- The artwork and resist should be laid together with applied pressure.
- Not all Vellum paper is UV balanced. ProBlast sell proven UV balanced Vellum paper.
- The blacker the artwork the better the exposure and the faster the washout
- Use ProBlast's Krystal Kote Black Art Spray to darken your artwork