

Cyanotype: Traditional and Modern

Cyanotype is a contact printing technique which you may know as sun print, solar print, or blue print. This early photographic process was created in 1841 by Sir John Herschel, and was popularized by English photographer and botanist Anna Atkins. Her book, "Photographs of British Algae: Cyanotype Impressions," published in October 1843, is considered the first photographically illustrated book.

Wet cyanotype, commonly called wet-cyan, is a recent variant of traditional cyanotype. Botanical materials are my subject of choice. As with eco prints, there is an element of surprise. Crisp blue and white images are traditional cyanotype. Ethereal, out-of-focus or undefined images with depth are wet-cyan. I am always experimenting, and constantly surprised by the results.



Dry after 24 hours.

Immediately after rinsing

Wet-cyan uses two powdered chemicals: green ferric ammonium citrate and red crystal potassium ferricyanide. Potassium ferricyanide is light sensitive on its own, and the purpose of the ferric ammonium citrate is to speed up the exposure process and darken the end color (Prussian Blue), which is permanently bound to the fabric or paper. It is light sensitive until exposed, so all preparations must be done in a darkened or dim room. I work with a prepackaged kit of chemicals sold by Jacquard.

As mentioned before, to prepare the papers or fabrics you will need to work in a darkened space since potassium ferricyanide is light sensitive. The prepackaged chemicals are mixed together and brushed onto the paper with a bristle brush or foam brush. If you want to skip this step, pre-treated paper and fabric are available for purchase, but I recommend that you treat your materials yourself, especially if you want brushstrokes to show. Allow your papers to dry in the darkroom, then place them in a light proof black plastic bag to protect them from light until you are ready to use them.

Use a test strip for exposure times when making cyanotypes. A test strip is not necessary for wet-cyans.

Have your supplies at hand, and work on a sunny day around mid-day for the best exposure. Plan to work quickly...your paper will begin exposure once you remove it from the light proof bag. Spray your substrate with distilled water. Spray the back of your paper with water, and place it on the substrate. Create the following sandwich on top of the paper: plant material, a spray of water, of vinegar, and of soap bubbles. You may also add from the optional list. Cover your paper with glass or plexiglass, and leave outside anywhere from 1 or 2 hours to 24 hours. For me the optimum time is about 4 hours. Remove the glass and plant materials, and rinse your paper in a tray of water, rinse until the runoff is clear, second rinse in a bath of hydrogen peroxide (a capful in tray of water) which will deepen the blue color immediately. Rinse a third time in clean water. Allow the paper to dry at least 24 hours and iron (on the backside) if necessary.

Supply list:

Jacquard Cyanotype Sensitizer Set, parts A and B, from Dick Blick or Dharma Trading Company. Jacquard has pre treated fabric on Amazon. Use distilled water to prepare the chemicals

Paper, there are many papers which will produce beautiful wet-cyans, but to begin, let's use the following: most inexpensive paper to start with is Canson Mix Media. Aches hot press watercolor paper, Legion Revere Platinum, Hahnemühle Platinum Rag, or Rives BFK, these are all unbuffered papers. For a thin paper try Hahnemühle Sumi-e 80gsm, Dick Blick or Talas. Ma paper from Oriental Art Supply is a thin mulberr/kozo paper which holds up very well (I use it to hang in my windows)

Light proof black plastic bags, Amazon or a good camera shop

Sheet of thick ($\frac{1}{4}$) plexiglass, a cutout from your kitchen counter, something that can withstand being wet for hours. Home Depot or Amazon

Sheet of glass or plexiglass (I prefer glass, tape the edges for safety), Home Depot or local glass supplier, not UV protected

Large binder clips, Hake brush without metal ferrule, 1" & 2" size or foam brush 1 1/2 - 2" size, apron & gloves, 3 to 4 spray bottles.



Objects to print, leaves, grasses, flowers, lace, stencil, (walk around your yard)

Vinegar, balsamic, cider or white (in spray bottle), soap bubbles (in a water bottle that you can keep shaking for more bubbles).

Hydrogen peroxide, this step is not necessary, but it will speed the printing process and allow the artist to see the final image much sooner. Be sure to give another final rinse.

Optional, you will get beautiful interesting prints without any additional stuff, but if you like to experiment these things can be fun.

Wine tannin (powder can be mixed with H₂O and sprayed on or use in a rinse bath to tone the final print), red wine (spray on), baking soda (dissolve in water and spray on), copper sulfate crystals (dissolve in water and spray on), salt flakes (can also be used on wet chemicals, same as for watercolors), indigo crystals (dissolve in water, spray), turmeric, paprika, saffron, etc (sprinkle on)

I have also made wet-cyans immediately after applying the chemicals, skipping the drying time.

Try doing both sides of the paper...requires at least the 140# paper. Let one side dry and do second side a few days later. Good results and nice to have double sided papers for book covers.

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