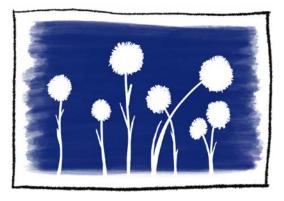
# How to Make Cyanotype Prints

at the Station North Tool Library





A **cyanotype** is a primitive photographic process. The emulsion that produces deep blue images after being exposed with the light of the sun

Prints can be made with anything that blocks light, such as leaves, flowers, fabric, film negatives, or printed transparenies. The process is highly variable depending on many factors which can often lead to unexpected results. Sometimes you might not like the outcome very much. But sometimes, the uncertainty creates an incredible result that you wouldn't have ever thought to try.

Experimentation and imperfection is inherently valuable to creation!

#### 1. Gather Tools & Materials

Here's what you need to get started!

- A surface to print on: You can technically use anything porous (meaning, it can absorb liquid). Paper, fabric, wood, and leather are all commonly used. Experiment and get weird!
- **Cyanotype chemicals:** The solution is made by mixing potassium ferricyanide and ferric ammonium citrate. You can buy these together in a kit made by Jacquard – it's available at Artist & Craftsman Supply on North Avenue
- **Printmaking objects:** These items will be arranged on your paper to create your design. They can be natural items like leaves, flower petals, and grass, or human-made items like lace, rubber bands, and metal washers. Look for relatively flat items for the crispest images.
- An old picture frame: Use the backing and glass from an old picture frame to hold your composition in place while it exposes. Use binder clips to hold the glass flush to the backing, with something to pad between the clip and the glass (a napkin works well).

## 2. Prep Your Paper\*

(\*Your printing surface may be fabric, wood, or something else. Just replace that word whenever you read "paper.")

- Mix your cyanotype solution according to the instructions that came with your kit. The first time you use it, separately dissolve the chemicals 24 hours in advance. After that, you'll mix only the amount you need when you're using it.
- 2. In a dim room, paint your paper with the chemical solution. (Try using a headlamp on red-light mode in a dark room!) Paint a thin coat for more consistent prints. Use more for unique drips and drops. Any variation in the chemical coating like dribbles and brushstrokes will show up in your final print.
- **3**. Let your paper dry completely in the darkened room. Any exposure to light at this point will affect your final print!



#### A Note on Prepping in Advance

Since painting the emulsion can be a little tedious, you might want to prepare extra paper so you can do a few exposure sessions. If you want to do this, make sure you keep all prepared surfaces in a light proof container. And guess what – you probably don't have a truly light proof container, so for best results, use up your prepared paper in a few weeks.

The cyanotype solution, though? Only mix as much of that as you need at one time. Once you mix the two parts together, it's unstable and will degrade if stored.

#### Testing, Testing...

If you are going for a more specific look or trying to get a precise result, using a **test strip** can help! A test strip is prepared and exposed before your main composition. With a timer, you gradually expose more and more of the paper. This shows you how the day's conditions – like cloud cover or time of year – will affect the exposure.

#### Optional: Make a Test Strip

- While you're prepping the rest of your papers, cut a narrow 8 12" strip. Mark off 1" sections, then paint the entire thing with emulsion.
- Place your test strip on your frame backing and arrange the test print materials on top. Clip glass on top with binder clips.
- With a piece of cardboard, cover the strip except for the first inch. Place it outside on a flat surface in a bright sunny area.
- 4. After 3 minutes, pull the cardboard back one inch. Repeat this after every additional minute of exposure. Use a timer! (You can modify this schedule any way you want depending on your materials and the conditions – just remember to write it down!)
- 5. After your last test zone is exposed, rinse according to the main instructions, except: add small amount of hydrogen peroxide to your wash basin. This will immediately oxidize the print to the final color.

#### 3. Compose!

Once your paper is completely dry, begin composing your image. Again, make sure you again complete this in a dim area so you don't accidentally expose your paper.

- 1. Place paper on the photo frame backing.
- 2. Arrange the materials into a cool design. Remember our composition tips!



3. Place the glass on top of your design. Secure with binder clips with a bit of padding to protect the glass. Keep the prepared composition shielded from light as much as possible until you begin exposing the image. I like to cover the glass with a piece of cardboard while I carry it my exposure spot.



## **Design Composition Tips**

- Rule of Thirds: Imagine a 3x3 grid on your paper. Put your main elements where those lines intersect. This can help balance the design elements with negative space.
- 2. **Symmetry:** Or, you can put your focal point right in the middle, especially when it comes to the natural symmetry in many leaves and flowers.
- 3. Lines: Use lines to point at a main focus. This doesn't always mean straight lines it might mean curvy stems, or the veins of a leaf.
- **4**. **Framing:** Instead of pointing, you can also encircle your focal point with secondary design elements, like using a string to make a literal frame.
- **5**. **Contrast:** Jam-packed materials can drown out the background with too many silhouettes. Keep in mind that the negative space in your composition is where all of the color comes from.

#### And remember... rules are made to be broken!

## 4. Expose!

The best time to expose cyanotype images is in late spring, summer, or early fall. Choose a cloudless day around solar noon, when the sun is the highest in the sky. You can still make cyanotypes in the winter, on cloudy days, or in the morning or afternoon - your process and results may just be a little less predictable.

- 1. Take your composition outside and put on a flat surface in a bright, sunny area.
- 2. Let it expose for about 8-15 minutes. This can vary a lot depending on what time it is, the time of year, and cloud cover. It can even vary in a single session, for example, if the sun comes and goes from moving clouds.

To get the darkest blue in your finished print, expose until the emulsion is a bronze color.

**3**. Cover your image to stop the exposure and then carry it inside.

#### 5. Hose!

 Rinse in cold water for at least five minutes. I like to use a basin to fully submerge the print, but keep the water running and overflowing for at least part of the rinse cycle to keep a good ratio of fresh water. I use a small-medium basin in a large sink or bathtub, or outside in a shaded area with a hose.

If you want, you can add a splash of hydrogen peroxide to the wash water. This will immediately oxidize the image, which brings it close to the final color. (I like to let mine develop naturally as it dries!)

- Place your rinsed print in a ventilated place to dry – I use a laundry drying rack. If you rinsed in plain water, your print will continue to darken to its final color as it dries.
- 3. Once your print is fully dry, it may be a little bit warped from getting wet. You can put it in between the pages of a heavy book for a few days to flatten it out.

#### Readings & Resources

- MP Photography on Cyanotype Toning: If you're interested in exploring different color cyanotypes with toning, this blog post has great instructions. It covers the basics of toning using washing soda, tea, coffee, and more.
- Lomography.com: Search "cyanotypes" on the Lomography Magazine site for tutorials, experiments, and inspiration.
- /r/Cyanotypes on Reddit: This subreddit is small, but folks regularly show their work, ask and answer questions, and share advice.
- Baltimore Artist & Craftsman Supply: They're right on North Ave. and carry all the supplies you need! Pick up the Jacquard Cyanotype Kit and some watercolor paper
  Fluid Cold Press is a quality but affordable paper.

# "We all have artist wounds. These are the ways we've been told we don't count, aren't good enough, or shouldn't try to be artists. We can all be artists." **– Aleah Black**

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