

Vandyke Brownprinting Instructions

Your kit contains:

100 ml Vandyke Brownprint Solution

250 grams Sodium Thiosulfate fixer crystals

Thank you for purchasing this Vandyke Brownprint kit by Bostick & Sullivan. It will make approximately fifty 8"x10" prints and produces a beautiful, rich, dark brown image. The final image is extremely permanent, but can be toned in platinum, palladium, gold or selenium for added brilliance and archival quality.

Please read and understand these instructions completely before beginning, and observe all safety precautions.

1.) Safety and Handling Information

The Vandyke solution in your kit is sensitive to ultraviolet light only, and can be handled under most room lighting conditions. A safelight is *not necessary* and normal incandescent lighting may be used during the entire process of making Vandyke prints. Fluorescent lighting may be used, but it is recommended that you limit the exposure of the chemicals and coated paper to them. This will limit the chances of fogging the image. Work in a windowless room, or shade any windows in your workspace.

Always wear plastic or latex rubber gloves while handling Vandyke solution, coating the paper and processing the exposed images. The solution should be considered poisonous. **Do not store it in a refrigerator used to store food or drinks.** The solution is stable at room temperature and will have a shelf life of at least 1 year from the date of purchase.

2) Preparing Your Workspace and Negative

You will need a negative the same size as your final image, and it must be printed in direct contact with the dried, Vandyke-coated paper under intense UV light. A 1000 watt metal halide bulb, ultraviolet fluorescent lights or sunlight can be used to expose the image.

You will need a split-back contact printing frame, vacuum frame or two sheets of plate glass to maintain proper registration and pressure between the negative and paper. For the purposes of these instructions, it is assumed the artist is using a split-back contact printing frame, which allows for inspection of the image during exposure .

Select a large table with a hard, smooth surface to coat your paper. The Vandyke solution can stain wood, metal and many plastic surfaces. Place several sheets of newspaper or blotter paper on top of the table to catch any extra solution.

If you are coating with a brush you should only use it for Vandyke printing. Avoid using a brush that has been used to coat other alternative process chemistry to limit contamination. A glass coating rod can be used for multiple handcrafted processes if you wash it properly between uses.

You will need 3 trays for processing the exposed image. Fill the first tray with tap water as an initial wash. In the second tray prepare a fixer bath by measuring 50 grams (approximately 4 heaping teaspoons) of fixer crystals per liter of cold tap water. The third tray will be a final rinse bath with slow cold running water.

Select a 100% cotton rag, unbuffered, archival quality paper to print on. If you are printing on a sheet of 8.5"x11" paper, make sure it has a minimum weight of 32 lb. We recommend using hot pressed papers with a minimum 47lb rating for larger images. Heavier papers will withstand wet processing better, and the hot pressed surface will produce a denser, sharper image with smoother transitions. Begin your printing with a paper that has a proven record and has been recommended for alternative processes, then experiment with other papers as you gain experience.

3) Coating and Drying

Take a piece of paper and tape the upper corners to your coating table using paper tape or masking tape. Place your negative on the uncoated paper and mark the four corners of the negative on the paper using a pencil. This will mark the area that needs to be coated and help you concentrate the solution inside the image area.

Using the supplied dropper, count out the proper amount of drops of Vandyke solution into a small glass or plastic cup. A shot glass, as well as small plastic cups commonly used for condiments in restaurants both work well.

Approximate drops needed for images, some papers will require more, some less:

4"x5" image = 12
5"x7" image = 18
6"x9" image = 24
8"x10" image = 40

3a) Using a brush

Wet your brush with distilled water, and then generously blot it on a paper towel to remove any excess water. This prepares the brush for coating and helps prevent the Vandyke solution from "wicking" up the bristles and keeps it on the surface of the paper.

Take the measured Vandyke solution and quickly pour the entire amount onto the center of your image area. Using very light pressure, immediately begin spreading the solution back and forth in a horizontal pattern until you have covered the entire image area. Switch to a vertical stroke and continue spreading the solution. Switch back and forth between vertical and horizontal strokes until the solution has absorbed into the paper. If you are still spreading solution after 30 seconds, reduce the amount of coating solution by 1/4.

Over-brushing can cause abrasions on the surface of the paper, resulting in small pieces of paper fiber clumping together in your image area. Using the pencil marks you made earlier as a guide, make sure you coat an area large enough to completely cover your negative. Your edges are never going to be perfect, so coat a little larger than necessary, then position the negative in the middle.

After you have finished coating the paper, place it in a dark spot to dry for about 1 hour. We *do not* recommend using a hair dryer to dry the emulsion. Our testing has shown that allowing the paper to dry naturally results in a superior image.

3b) Using a coating rod

Take the measured Vandyke solution and pour the entire amount along one edge, just outside of the image area. Place the coating rod in the middle of the solution and wiggle it a few degrees clockwise and counter-clockwise. The capillary action will draw the solution evenly along the entire length of the coating rod.

While applying very light pressure, gently pull the coating rod across the image area. When you reach the edge of the image area, lift the rod, skip over the bead of solution, then drag the solution across the paper in the opposite direction. If you are able to make more than 6 passes back and forth, reduce the amount of coating solution by 1/4.

If a line of solution remains on the paper after 10 passes, gently blot the excess solution with the corner of a paper towel to remove it. Dry the coated paper in a dark spot for about 1 hour.

4) Exposure

The Vandyke image darkens and develops as it is exposed, producing a "printing out" image, negating the need for a separate development stage. Using a traditional split-back contact printing frame allows the artist to inspect the image during exposure without disturbing the registration between the negative and paper. This is especially useful when using natural sunlight which is variable and unpredictable, and exposure times can vary greatly.

Place your negative inside the print frame and center it on the glass. Make sure the image is not reversed when viewed through the glass, or your final image will be reversed.

Carefully place your dried Vandyke-coated paper face down in the frame, covering the negative. Install the felt-lined hinged back and lock the springs in place.

Place the frame under your UV light source or in direct sunlight to begin exposing. You will see the emulsion coated area outside of the negative begin to darken almost immediately. Judging the proper time to remove the print from the light is the most important part of the entire Vandyke process.

After 3 minutes of exposing, remove the print from the light and inspect. Minimize UV exposure while inspecting, to prevent fogging the image. Carefully open **one** leaf spring on the hinged back. Fold that half of the frame open to expose the backside of the print. Carefully lift the paper by an edge and fold it back to reveal the image. Vandyke prints will darken considerably during washing, fixing, optional toning bath and drying stages, so you will need to stop exposure when it appears approximately 1/2 as dark as the desired final image.

After an initial 3 minutes, the image will have darkened considerably, but it is likely that it will need more exposure. Close the frame and lock the leaf spring into place, then place the frame under your light source again. Repeat the inspection process every few minutes until the image has darkened sufficiently to begin showing details in the highlights.

5) Washing

Take the exposed image from the print frame and place it in the first tray of wash water. Agitate the tray, and notice the yellow stain lifting off of the paper. Wash the print for 3-5 minutes, or until most of the yellow emulsion stain has been removed from the highlights of your image. Change the wash water after 8-10 prints, or if washing times begin to take longer than 5 minutes. Using warm water (90 degrees F) in the first tray will shorten wash times considerably.

6) Fixing

Remove your print from the first wash tray and transfer it to the second tray with the fixer solution. Agitate the tray periodically, and watch as the image darkens. Continue agitation for 5 minutes. Remove the image from the fixer, and it should be approximately 3/4 as dark as your final desired image. In the final drying stage the image will darken and the color will richen even further. Over-fixing can lead to bleaching of the image, while under fixing will cause archival permanence issues.

7) Final Wash and Drying

Move the print from the fixer tray to the final wash tray. Set the flow so a slow, constant stream of cool water is running. Wash the print for 30 minutes, agitating the tray once every 5 minutes.

After washing for 30 minutes, gently lift the print from the tray by a corner and allow the water to drain off of the paper for 15 seconds. Hang the print from a clothes line or place on a plastic window screen to air dry. Alternatively, you can dry the print on several paper towels layed on a table, making sure to keep the print from sticking to the towels as it dries.

We recommend flattening your dried prints in a warm dry mount press, then mounting and matting them on archival, acid-free board.