

Directions for using the Van Dyke Kit

Bag A contains ammonium iron (III) citrate;

Bag B contains tartaric acid;

Bag C contains silver nitrate. Attention! Be careful when using and handling this chemical: it burns and stains the skin. Always wear gloves and goggles when you are handling this product. Keep away from children.

It is necessary to keep these products away from children and to handle them with care, particularly when opening the bags because the chemicals are very fine powder and particularly the silver nitrate (caustic).

It is necessary to prepare the working solution quickly when you've got your kit from the Post.

How to prepare the working solution :

It is necessary to operate in artificial light (40 W max) because daylight could damage chemicals, which are light sensitive.

- a) Solution A: In a small cup or beaker pour 25 ml of demineralised water. Into this water, slowly pour the contents of Bag A and stir with care until it is completely dissolved. It is possible some scum might appear. Leave the solution to sit for 5 minutes.
- Solution B: In another small cup or beaker pour 25 ml of demineralised water. Into this water, b) slowly pour the contents of Bag B and stir with care until it is completely dissolved.
- Solution C (silver nitrate): In a third small cup or beaker pour 25 ml of demineralised water. Into c) this water, slowly pour the contents of Bag C and stir with care until it is completely dissolved. Silver nitrate dissolves easily.

Then, mix A and B. When both solutions are completely mixed, pour very slowly the third solution (solution C) into the A+B mix you've just created and stir. It is necessary to add the C solution very slowly, a few ml at a time. If it is added too quickly, it is possible that you will get a precipitate in your solution. If this happens, you must stir the solution until the precipitate disappears. When there is no more precipitate, you can pour some more C solution into the A+B mix, and so on until all the C solution is mixed with A+B.

When you have completely added A+B+C, add some demineralised water to make 100 ml. Then, pour the solution into a 100 ml brown bottle (you can buy it at your chemist's). Finally, write on the bottle "Van Dyke – working solution". Show the date and place the bottle in a dark and secure place, away from the children.

This solution will keep its properties for one year and more.

Coating the solution:

For coating, it is necessary to operate in artificial light (40 W at a max) because daylight could damage chemicals, which are light sensitive.

With 8ml you will be able to coat about 4 sheets A4.

With a 3 cm width brush (without metal parts), coat the solution on to a sheet of paper. This paper must be a bit bigger than your negative.

The paper must be sufficiently strong, for example 150 g/m2 (Lana 150 g/m² or more is excellent). When you begin to coat, start from the middle of the sheet and do not to have too much solution in your brush.

Then cross with the brush several times at right angles till the solution is evenly spread over the paper. Then, allow to dry in a dark and dry place. The sheets can also be dried using a hair drier Use the prepared sheets within five or six days maximum. Store them in a very dry and dark place. The sheets must be yellowish.

Exposure under a negative:

Place the sensitized paper on a flat board and under a negative. The negative must be a strong one (plenty of contrast) because the Van Dyke process is a soft, low-contrasting process. Place a heavy sheet of glass (free from dust or any marks) on top of the negative. Expose to a UV source. It might be the sun or artificial light. The length of time depends on the negative (density) and the light. Test first as under an enlarger with small pieces of sensitized paper with several different exposure times. The Van Dyke process is approximately 4 times more sensitive than the cyanotype.

How to process after exposing under UV rays:

Place the paper, with the image uppermost, in a tray with water. Gently agitate the water. It is best to wear gloves for this rinsing process. Leave the picture in the tray with water for about 1 minute. The water will turn a bit milky because of the silver nitrate. Change the water until the milkiness has disappeared (once is normally sufficient). Then place the picture (image uppermost) in a tray with tap water and a small quantity of fixer. For example, add 10 cl of a working solution of fixer in 500 ml of tap water. The image will turn deeper brown in colour. Leave the picture for 2 minutes, then rinse in running water (or several changes of water) for about 10-15 minutes, to remove all traces of fixer.

Afterwards, hang the print to dry, or lie it at an angle to drain until dry. Once dry, the print can be pressed in a heavy book or in a commercial press.