

# Directions for use the Cyanotype Kit (12x-Kit)

Bag A contains ammonium iron (III) citrate;  
Bag B contains potassium ferricyanide.

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.

## How to prepare the stock solutions

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 beaker pour 600 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 and then pour it into a brown bottle (750 ml or 1 litre). You can buy this bottle (and the other for solution B) at the chemist's. Add to the solution 10 ml formalin (buy it at the chemist's). TAKE CARE: FORMALIN IS DANGEROUS FOR HEALTH! DON'T SMELL IT OR SWALLOW! KEEP FORMALIN AWAY FROM CHILDREN. Adding the formalin allows you to keep your solution for a long time (many months) and to protect it against mould. Then write on the bottle "Cyanotype, sol. A, ammonium iron (III) citrate 25%", write the date and place the bottle in a dark and secure place, away from children.
- b) Solution B : In a small cup or beaker pour 600 ml of demineralised water. Into this water, slowly pour the contents of Bag B and stir with care until it is completely dissolved. Pour this solution into a brown bottle (750 ml or 1 liter). Write on it "Cyanotype, Sol. B, Potassium ferricyanide 10%", indicate the date and place the bottle with the other one (bottle A).

## How to prepare a working solution

For preparing the working solution and for coating, it is necessary to operate in artificial light (40 W maxi) because daylight could damage chemicals, which are light sensitive.

Mix one part of solution A with one part of solution B. Do not to mix too much solution; with 4 ml of each solution (= 8ml), you can coat about 4 sheets A4.

## Coating the solution

With a 3 cm width brush without metal, coat the solution on to a sheet of paper. This one must be a bit bigger than your negative. The paper must be sufficiently strong, for example 150 g/m<sup>2</sup>. 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 on the paper sheet. Then, allow to dry in a dark and dry place.

Use the prepared sheets within two or three days maximum. Store them in a very dry and hot place (20° C minimum). The sheets must be yellow-green. If they turn blue, they are out of date.

## Exposure under a negative

Place the sensitized paper on a flat board and under a negative. The negative must be a soft one (not much contrast) because cyanotype is a hard, very 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 at several different exposure times.

## How to process after exposing under UV rays

Place the paper, with the image uppermost, in a tray with tap water. Gently agitate the water. Then place the paper in the same conditions in a second tray with tap water and add hydrogen peroxide as following:

Water 20° C.....200 ml

Hydrogen peroxide 10%.....5 ml

Afterwards rinse well, and then hang the print to dry.

## Bibliography

W. Crawford, *The keepers of light*, Morgan & Morgan, New York 1979.

M. Ware, *Cyanotype*, Science Museum, London 1999.