Directions for use the Cyanotype Kit
(Double Kit)

KEEP CHEMICALS AWAY FROM CHILDREN

Bag A contains ammonium iron (III) citrate;
Bag B contains potassium ferricyanide;
Bag C containts Thymol (harmful chemical DON'T SMELL IT OR SWALLOW!)

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 small cup or beaker pour 100 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 small brown bottle (100 ml). You can buy this bottle (and the other for solution B at the chemist's. Then write on the bottle "Cyanotype, sol. A, ammonium iron (III) citrate", indicate the date.

You have now to add the Thymol (Bag C) to the Solution A.. Adding the Thymol allows you to keep your solution for a long time (many months) and to protect it against mould. First, dissolve the Thymol in a very small quantity of alcohol (Ethanol). Ten drops in a spoon will be sufficient. When the Thymol is dissolved, pour it in the Solution A and mix gently. Place the bottle in a dark and secure place, away from children.

b) Solution B : In a small cup or beaker pour 100 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 small brown bottle (100 ml). Write on it "Cyanotype, Sol. B, Potassium ferricyanide 10%", indicate the date and place the bottle with the other one (bottle A), away from children.

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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 or 4 cm width brush without metal (or with stainless 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/m2. 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.