

Background/Context

Cyanotype is a photographic printing process that produces a cyan-blue print. Engineers used the process well into the 20th century as a simple and low-cost process to produce copies of drawings, referred to as blueprints. The process uses two chemicals: ferric ammonium citrate and potassium ferricyanide.

Equipment needed

Ferric Ammonium Citrate	Scales	3 containers for mixing (ideally brown glass bottles)
Potassium Ferricyanide	Measuring Jug	Plastic Spoons
Protective Equipment: Facemask, Gloves & Apron	Brushes & Sponges	Glass or Clear Perspex
Sunlight or UV Source	Water trays	Heavy papers approx 300 gsm
Found materials such as threads, leaves, feathers, buttons etc	Acetate/Tracing Paper	Black pens/china graph pencils

Mixing the Chemicals

Using a plastic spoon mix 25g of ferric ammonium citrate with 100ml of water. In a separate container mix 10g potassium ferricyanide with 100ml water. Mix the two solutions together with a 1:1 ratio immediately before use. Chemical solutions can be stored separately in glass brown bottles for months but ammonium ferric citrate will grow mould which will need sieving out.

Coating the Papers

Wear gloves when applying the solution.

In a dark room or room with a low level light the solution can be applied to paper using a brush - or for even coverage use a sponge brush.

Keep the coated papers in the dark and ideally leave to dry flat.

Dry coated papers can be kept in a light sealed black bag until exposed in sunlight or using a UV light box.

Exposing your Image

Using sunlight:

Place your objects or acetate image on top of the coated side of the paper and place a piece of glass or clear perspex on top.

Outdoors you will need to check your image periodically to check the exposure.

On a sunny day in June it can take as little as 15 minutes, but on a cloudy day in January it could take up to 4 hours. A completely exposed cyanotype will go a cool grey colour.

Exposing Stages:



Original tone:
greenish yellow

After a few minutes:
light green

Bluish green

Perfect exposure:
bluish gray

Using a UV Lightbox:

When using the UV lightbox to expose cyanotypes the objects or images will need to be placed on the glass top first and the paper face down on top. 20-25 minutes work well using our exposure unit but we recommend doing some tests to find the right times.

Developing the Image

Develop in cool water in a tray or in running water until all the yellow has gone and the water runs clear and there is no blue bleeding on the image. Once developed use a clean towel or blotting paper to blot out the excess water and leave to dry.

Toning the Image

The colour of cyanotypes can be altered using different toning methods including using coffee, tea, lemon juice and washing soda. For more information on toning take a look at MPaul Photography -

<https://mpaulphotography.wordpress.com/cyanotype-gallery/>



Untoned



Tannic Acid/Green Tea: Aubergine



Coffee: Cool brown tones



Citric Acid/ Lemon Juice: Bright Blue

Further Reading/Useful Resources

Hannah Lamb - Textile Artist working with cyanotype processes -

<https://www.hannahlamb.co.uk/home-gallery>

Printer Johnson - Large scale paper cyanotype prints -

<http://printerjohnson.com/Cyanotype-Prints>

Silverprint is a supplier of the chemicals and equipment needed to produce cyanotypes, they also sell starter kits - <https://www.silverprint.co.uk>