

Egg Oil Emulsion

Egg tempera, first used in Egypt in the first century AD, was favored by Italian panel painters until the 16th century. Egg tempera is being re-examined today due to its brilliant color, archival properties, and relatively non-toxic nature. Depending on application, completed egg tempera paintings can be matte, or brought to a high shine. I started using egg tempera in 1996, after years of working in oils. Solvents of oil painting were problematic, due to health hazards associated with continued usage.

Traditionally, egg tempera is made by mixing dry pigments with a binding medium. However, pigments in dry form are hazardous. Instead, I use paints already suspended in water: watercolors in tubes. Clay Lohmann, my husband whom I refer to as Mr. Materials and Techniques, provides this egg oil emulsion recipe:

Separate egg and discard white.

Place yolk in a small jar.

Add two drops of non-drying oil: walnut, sunflower, safflower, or linseed.

Add a few drops of water.

Mix well with a small bristle brush.

Use above egg medium with tube watercolors at about a one-to-one ratio, depending on the color and desired effect. It you see bubbles when applying paint, your mixture has too much water. Apply thin layers of tempera to a rigid surface, such as a cradled hardwood panel. It is not necessary to prime your surface-- in fact, never prime with acrylic gesso as it may have too much acrylic for tempera to bond. *Clayboard* cradled panels work well. If you want to make a white surface, either apply a thin coat of white egg oil emulsion (above recipe), or learn to make a traditional gesso of rabbit skin glue, gypsum, marble dust, and titanium dioxide.

Keep in mind:

- 1 With the above recipe, let paint set before applying additional layers. Drying time varies, depending on paint mixture, from 30 minutes to several hours before you can add new layers.
- 2 Sable and *sablene* brushes work well for glazing additional layers. Bristle brushes may lift under-painting. Overworking an area may also lift paint.
- 3 Egg medium may be saved overnight: cover and refrigerate. Discard after twenty-four hours.
- 4 While tempera sets quickly, it takes a long time to truly dry. After photographing the work, you can even out surface shine. Several months after completion, tempera can be lightly buffed with yarn that still contains lanolin. If desired, it can be brought to an enamel-like shine. No varnish or other finish coat is recommended. One exception: oil paint may be applied over tempera. However, once you switch to oils, don't go back to tempera.
- 5 Dry pigment can be used instead of watercolors; be sure to where a mask.

Variations

- 1 There are many egg tempera recipes online. Try a few and see what works for you.
- 1 Instead of making your own egg medium, Sennelier Binding Medium is a ready to use egg-based mixture.
- 2 If you prefer pre-mixed egg tempera colors, try Sennelier Egg Tempera in tubes. This traditional formula is wonderful. I have tried other brands and can't recommend anything but Sennelier Egg Tempera.

In closing, use egg oil emulsion or *Sennelier Binding Medium* for a beefy paint that can be brought to a shine, not unlike oil paint. For more traditional egg tempera, thin the *Sennelier Binding Medium* with more water, or just use *Sennelier Egg Tempera* in tubes. You must apply true egg tempera in thinner layers than the egg oil emulsion formula. Happy painting!