

Egg Tempera



Chemical Concepts:

When egg yolk is mixed with water and pigment it forms an emulsion of aqueous and non-aqueous binding materials in which the pigment particles are suspended. An emulsion is formed when drops of insoluble liquid are suspended in a soluble liquid with the aid of an emulsifying agent. In the egg tempera that we did, the yolk was used as the vehicle and binder. The oils found in egg yolks are “drying oils”. This means that they react to form a flexible, protective film as they dry.

Reflections:

This lab helped clarify the binder and solvent lecture as it was very clear which was the binder and which was the solvent as well as the idea of paint being an emulsion. When making my paints I did notice that certain pigments did not mix as well as others.



History:

Egg tempura reached popularity in the 10th century and reached its peak in the Renaissance before being replaced by oil painting. Today it has been revived, with many artists bringing back this classic technique. There is a Society of Painters in Tempera formed in 1901.¹ Their mission is to keep this art form alive, however, even they admit they are getting “burned out.” Egg tempera paintings can still be found in modern day galleries and art shows.

Sources

1. <http://www.eggtempera.com/>
2. <http://publicphoto.org/>