

## Ancient Egyptian Paint

Pigments	Yellow and red ochre, malachite (green), lapis lazuli (blue), charcoal, chalk, cinnabar (vermillion red), orpiment (yellow), smalt (blue)
Binders	Mostly watercolour paint using spars and gums from shrubs like the Acacia tree, beeswax, eggs, sometimes a casein glue made from milk and lime (Calcium oxide)
Solvent	Water
Application	Brushes made from reeds, hair and chewed twigs
Surface	Papyrus; walls of tombs (these would be prepared first with gesso, made from gypsum mineral and animal skin glue)



### Make Your Own Casein Glue from Milk

1. Heat some skimmed milk (do not let it boil)
2. Add about 3 teaspoons of vinegar (an acid) to the milk and stir slowly until the milk separates into curds (solid sticky bits) and whey (clear liquid)
3. Pour the curds and whey through a tea strainer or sieve to collect the curds
4. In a container, add a little bit of bicarbonate of soda or milk of magnesia (alkali)
5. You should now have a sticky white substance called casein (milk protein). This can be used as a binder in paint – just add some pigment!

## Mediaeval European Paint

Pigments	Yellow and red ochre, verdigris (green), lapis lazuli (blue), azurite (blue), charcoal, chalk, cinnabar (vermillion red), orpiment (yellow), lead white, red lead, gold, pigments from vegetable dyes
Binders	Egg yolk for egg tempera, then after 1400 AD linseed oil more widely used
Solvent	Water for egg tempera, turpentine for oil paint
Application	Brushes made from feathers, fur and boar hair
Surface	Egg tempera was mainly painted on to wood or plaster or canvas which had been prepared with gesso.

