

IRON GALL INK



Oak galls

Writing Ink is based on the action of atmospheric oxygen and an acid mixture of iron salts and tannin, which is made from an infusion of oak galls. The earliest record of the material we know as writing ink, made from medieval time to the present, is ~~writing~~ of Theophilus, Byzantine emperor 813-842 AD, although Pliny the Elder 23-79 AD mentions in his Natural History that paper treated with copperas could be blackened with an infusion of nutgall. It is also mentioned in The Booke of Secrets 1596.

Iron gall ink is essentially created by the chemical reaction between tannic acid and iron sulphate in an aqueous solution. The primary active components in tannin are gallotannic and gallic acid. Combined with iron sulphate they produce a black pigment called ferric tannate upon exposure to oxygen. A small amount of pigment forms by reacting with oxygen in the water but much more is produced after the ink has been applied to paper and exposed to air for several days. When kept from sun it will last and last ~~however~~, on exposure to light it will fade and because of this was not regarded suitable for drawing. Its corrosive nature makes its use unsuitable for expensive pens.

Ingredients:

Diseased oak gall nuts (oak apples) are collected from oak, oak apple ~~and~~ ~~and~~ pi trees and depending on the source vary in shape.

Iron Sulphate