

Basic Information About Paint Pigments:

Paints consist of three things:

1. The Pigment, that gives color and body to the paint.
2. The Binder, that holds the pigment together and sticks it to the surface. Also called the Medium.
3. Filler, which is used in cheaper paints instead of additional pigment to give body to the paint. Pigment costs more than filler. Professional grade paints, i.e., the more expensive ones, use pigment instead of filler. Paints with filler tend to look a bit dim or dirty when thinned and will not create as rich color when mixed with other pigments.

There is a fourth component, the thinner, but that is not really part of the paint. For watercolor, gouache, and acrylics, water is the thinner. For oils, it is turpentine.

By adding, or varying the amount of binder, one can create glazes, usually done with oils (quite common) and acrylics (less common).

By adding thinner, one can create washes.

Varnish is used with finished oil paintings to protect the surface over time. The varnish can be stripped and re-applied to clean a painting. Varnish has a different structure and thinner, so it can be dissolved without disturbing the oil paints underneath. Acrylic varnish is actually acrylic binder without pigments and used for gloss effects, but it is not used in the same way as varnish for oil paints as it can't be removed without also removing the acrylic underneath--same material, so solvent will remove both. I have recently seen a varnish for acrylic paints.

Tuning a Pen:

Pens get dull because paper will dull metal over time. Ask anyone who sews what happens to the person who commits the grievous sin of using the sewing scissors to cut paper. Most pens, when new, will also need to be tuned (sharpened).

How to know when pen needs to be sharpened:

A good indication the pen needs to be tuned is when the pen feels like it is sliding over the surface rather than writing on the page. If you have been using the pen for a while, flip the pen over and write with it upside down. If it writes better upside down, it is time to sharpen the pen. Frequently, a new pen tip will need to be tuned—but write with it first!

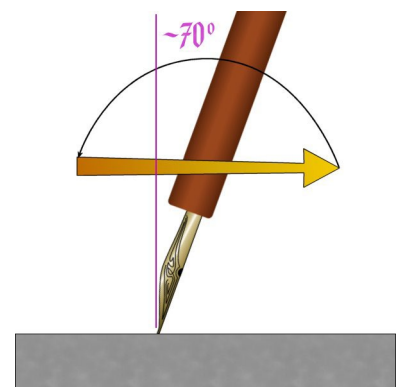
Procedure:

I use a very smooth sharpening stone. Now days, I use the one that come with the Rotring Art Pen set. Before that, I used an Arkansas Stone or something like it.

1. Lean the pen backwards about 70° and do a couple of strokes.
2. Wipe the nib to remove rubble and try a stroke or two.
3. Repeat as needed.

If it becomes too sharp (which happens when you get bored and do to many strokes before testing or are out of practice) then one stroke at about 70° leaning forwards.

Occasionally, one will have to do a *gentle* swipe on each corner (pen upright, lean left then right) to remove the cutting edge on the corner and to allow for edge of the pen flourishes.



Gold Leaf: Pink Stuff Gilding

When I was in college, I had a course on media and techniques taught by the principle restorer for the Philadelphia Museum of Art. One of the projects was panel paintings with egg tempera. We started with Masonite, Plaster, A sheet of Rabbit Skin ready to become glue, eggs, and pigments. We saturated the plaster to make gypsum (stir forever), heated the glue, and made gesso. Layer after layer of gesso, polishing each layer to incredible smoothness. Then separating the egg yolk without any contamination from the white, adding water to make glair, and then placing powdered pigment onto a palate and mixing as needed, the tempera and using feather strokes to do the painting.

When I got into calligraphy and read about gold leaf, the described base for gold sounded like a complex gesso. So, I remade the gesso from the panel painting class, built up layers and got a raised letter that was so shiny the gold actually appeared dark where it wasn't reflecting. But... Rabbit skin glue stinks and rots very fast--so while it produces good results, it steals time from actual production.

Note: As a member of the military, and then an engineer with a second job as a senior sergeant in the reserves, my priority has always been to achieve authentic appearance for the recipient, with materials that will last (archival materials) in the minimal amount of time available for my hobby. I USUALLY go for authenticity in attitude over authenticity in materials, i.e., how to I expand my palette to produce lasting results for the customer.

My father was a chemist working in the pigments department of Dupont. I grew up with an understanding of how paints are made. Combining my reading on gesso for gilding in Edward Johnson's book, the media and techniques class, and the knowledge from "contamination" from my father, I looked for an easier method of finding a burnishable pad for gilding.

Utrecht produced a zinc white gesso. Zinc white, while not as pure a white as TiO_2 , is a soft white and very malleable. Not as perfect as the rabbit skin gesso, but still very good--and fast. An hour or two to produce a gilded letter rather than most of a week. But zinc white isn't as white as TiO_2 , so companies stopped making zinc white gesses. The problem with TiO_2 is it is a 9 on the Moh Scale and will resist any attempt to burnish (agate burnishers are a 6 on the Moh Scale--guess who wins!).

So, working with limited finances and time, I started with TiO_2 gesso, added some media (acrylic media without pigment, to better surround the TiO_2 , red pigment to make the pad stand out against the page (and a bow to tradition), and sugar to increase hydroscopic tendencies (which in the plastic I doubt really works that well, but the placebo effect is very real). The pink stuff substitutes malleable pigment with glossy media with enough pigment for body. Works on many surfaces and will last.

I am now experimenting with PVA and Marble dust—but that skips 40 years of further experimentation. The pink stuff works very well if you respect its limitations.

Glassine is Your Friend.

Glassine paper is a semitransparent, like tracing paper, slick surfaced paper that is resistant to air, water, and grease. It is very useful for protecting scrolls. I always encase a scroll in a glassine folder to protect it from all the people who will handle it on the way to court and the recipient. Further, I often carry spare, scroll sized, glassine folders to give to those who receive scrolls without such protection. Because of its slick surface, it will protect the scroll from sliding damage in larger folders.

Glassine is also useful during the production of scrolls as a surface used to protect areas of the scroll not currently being worked on. As it is like tracing paper, but more transparent, it protects the area while allowing you to see the work underneath. It resists water, which is useful when being clumsy. However, “resists” does not mean waterproof. If you spill water on it, you will have only a few seconds to remove it from contact, but seconds is better than nothing. And it keeps your greasy, oily fingers off the surface of the scroll.

It is also useful when gilding. I use the extra pieces from making folders, to cover freshly laid gold to do the first burnishing.

Glassine is inexpensive enough that it pays for itself in one or two scrolls.

Pen Flush for Fountain and Dip Pens:

From: Margarete la Gantiere (mka Gretchen Schroeder)

- 9oz distilled water
- 1oz non sudsing ammonia (5%)
- 3-5 drops of Dawn dish detergent

Keep in a well labeled jar!

For fountain pens always flush out as much ink as possible with plain water.

Flush with pen flush solution.

Re flush with water to remove any solution.

Dip pens can also be cleaned by soaking in this solution. Brush with a soft toothbrush if badly encrusted. Rinse in water and dry thoroughly.

Note from Margarete: *This is not a secret formula. It was one that was developed out of formalizing word-of-mouth recipes from several veteran fountain pen repair people, based on what they recommended and/or used in their shops.*