**MATERIALS AND BASIC RECEPIES for OIL PAINTING**

**BOLD** \* are most often used materials. I will talk more about options and what can replace some of them.

**Classical Ingredients:**

Rabbit skin glue

**GESSO:**

Classical (chalk, marble dust, zink - oil based)

**\*Modern (acrylic based/water soluble)**

**\*Linseed Oil**

Stand Oil

**\*Gum Turpentine (or a replacement)**

Venice Turpentine

**\*Damar Varnish**

Oil wax

**Turpentine** (also called **spirit of turpentine**, **oil of turpentine**, and **wood turpentine**) is a fluid obtained through the [distillation](http://en.wikipedia.org/wiki/Distillation) of [resin](http://en.wikipedia.org/wiki/Resin) obtained from trees, mainly [pine](http://en.wikipedia.org/wiki/Pine) trees.

**Venice Turpentine** is thicker and is collected from larch trees. Shoemakers used it for glue for many centuries.

**GESSO** is the [Italian](http://en.wikipedia.org/wiki/Italian_language) word for "[chalk](http://en.wikipedia.org/wiki/Chalk)" and is a powdered form of the [mineral](http://en.wikipedia.org/wiki/Mineral) [calcium carbonate](http://en.wikipedia.org/wiki/Calcium_carbonate) (marble). Gesso was traditionally mixed with animal glue, usually [rabbit-skin glue](http://en.wikipedia.org/wiki/Rabbit-skin_glue), to be used as an absorbent primer coat for [panel painting](http://en.wikipedia.org/wiki/Panel_painting) with [tempera](http://en.wikipedia.org/wiki/Tempera) paints. Classical GESSO is a pure mix of rabbit skin glue, chalk and marble dust.

**ACRYLIC GESSO** Modern "gesso" is actually a combination of [calcium carbonate](http://en.wikipedia.org/wiki/Calcium_carbonate) with an acrylic polymer medium, a [pigment](http://en.wikipedia.org/wiki/Pigment) and other chemicals that ensure flexibility, and ensure long archival life. It is sold premixed for both [sizing](http://en.wikipedia.org/wiki/Sizing) and priming [canvas](http://en.wikipedia.org/wiki/Canvas) for [painting](http://en.wikipedia.org/wiki/Painting). While it does contain calcium carbonate to increase the absorbency of the primer coat, [Titanium dioxide](http://en.wikipedia.org/wiki/Titanium_dioxide) or titanium white is often added as the whitening agent. This allows the "gesso" to remain flexible enough for use on canvas.

**Linseed Oil** is a **flax seed oil**: a clear to yellowish oil obtained from the dried ripe seeds of the [flax](http://en.wikipedia.org/wiki/Flax) plant .The oil is obtained by cold pressing, sometimes followed by [solvent extraction](http://en.wikipedia.org/wiki/Solvent_extraction). Linseed oil is a common carrier used in [oil paint](http://en.wikipedia.org/wiki/Oil_paint). It can also be used as a painting medium, making oil paints more fluid, transparent and glossy. It is available in varieties such as cold pressed, alkali refined, sun bleached, sun thickened, and polymerized (stand oil). The use of linseed oil was a significant step in the technology of oil painting.

**Stand Oil** is linseed (flax) oil that has been boiled and thickened.

**Damar Varnish is Dammar** [**gum**](http://en.wikipedia.org/wiki/Natural_gum). It is obtained from family of trees in [India](http://en.wikipedia.org/wiki/India) and [East Asia](http://en.wikipedia.org/wiki/East_Asia). After being taken from the tree it is dried into crystals and crushed and cooked into resin “varnish”

Many other oils can be used in oil painting. Vegetable oil, corn oil and olive oil are not recommended, because of how slow they dry and how yellowish they later become. Mineral oil (sold as “car oil” in hardware stores) is usable, but needs a lot of filtering, standing and smells. Walnut oil, poppy seed oil are good, but will dry slowly.

**Classic Recipes for Painting Mediums:**

**Leanest Basic Painting Medium:**

* 1 Part: Linseed Oil
* 5 Parts: Gum Turpentine

**Leaner Basic Painting Medium:**

* 1/2 Part: Linseed Oil
* 1/2 Part: Stand Oil
* 5 Parts: Gum Turpentine

**Lean Basic Painting Medium:**

* 1 Part: Stand Oil
* 5 parts: Gum Turpentine

**All Purpose Lean Painting & Glazing Medium:**

**(Artists use this recipe from start to finish)**

* 1 Part: Stand Oil
* 1 Part: Damar Varnish (5 lb. cut)
* 5 Parts: Gum Turpentine

**Fat Stand Oil Damar Concentrate:**

* 1 Part: Stand Oil
* 1 Part: Damar Varnish (5 lb. cut)
* 3 Parts: Gum Turpentine

**Very Fat Stand Oil Damar Concentrate:**

* 2 Parts: Stand Oil
* 1 Part: Damar Varnish (5 lb. cut)

**Very Fat Medium:**

* 1 Part: Stand Oil
* 1 Part: Linseed Oil
* 1/4 Part: Dorland's Wax

**Very Fat Medium:**

* 1 Part: Stand Oil
* 1/5 Part: Damar Varnish (5 lb. cut)
* 1/4 Part:Wax

**Old World Glazing Medium:**

* 9 parts Damar Varnish (5 lb. cut)
* 9 parts Turpentine
* 4 parts Stand Oil
* 2 parts Venice Turpentine

**SYNTHETIC**

Many mediums in Art Store that different companies give strange names, like “Galkyd” or “Galkyd Light” are resin-based mastics. They smell less, some dry faster, some help paint dry slower.

Turpentine has also been re-invented to make it smell less. It has different names in Art Store, depending on the brand.

Mediums that I personally recommend is made by Gamblin (English brand) and is called Galkyd. They do it in 3 versions. One is Galkyd – an imitation of stand oil, one is Galkyd Light – an imitation of linseed oil and one is an imitation of “Old world glazing medium”. Those 3 dry very fast (for oil paint). The same company makes a slow-drying medium and its own version of Turpentine, called Gamsol.

**BASIC OVERVIEW HISTORY OF COLOR THEORY**

[Johann Wolfgang von Goethe](http://en.wikipedia.org/wiki/Johann_Wolfgang_von_Goethe) first studied the physiological effect of opposed colors in his [*Theory of Colours*](http://en.wikipedia.org/wiki/Theory_of_Colours) in 1810. Goethe arranged his color wheel symmetrically, "for the colours diametrically opposed to each other in this diagram are those that reciprocally evoke each other in the eye. Thus, yellow demands violet; orange, blue; red, green; and vice versa: thus... all intermediate gradations reciprocally evoke each other."

[Ewald Hering](http://en.wikipedia.org/wiki/Ewald_Hering) proposed opponent color theory in 1892. He thought that the colors red, yellow, green, and blue are special in that any other color can be described as a mix of them, and that they exist in opposite pairs. That is, either red or green is perceived and never greenish-red; although yellow is a mixture of red and green in the RGB color theory, the eye does not perceive it as such.

In 1957, Hurvich and Jameson provided quantitative data for Hering's color opponency theory. Their method was called "hue cancellation". Hue cancellation experiments start with a color (e.g. yellow) and attempt to determine how much of the opponent color (e.g. blue) of one of the starting color's components must be added to eliminate any hint of that component from the starting color.

**SYNTHETIC RECEPIES**

**Chemical resins are not mixable with any oils**

**Turpentine or its imitation are.**