Higgins

ACRYLIC drawing ink

MIXING GUIDE


Made in the U.S.A
Higgins
PROCESS YELLOW
YELLOW MEDIUM
ORANGE
RED LIGHT
RED
PROCESS MAGENTA
PURPLE
ULTRAMARINE BLUE
BLUE
PROCESS CYAN
THALO* GREEN (BLUE SHADE)
THALO* GREEN (YELLOW SHADE)
SEPIA
BURNT SIENNA
BROWN
YELLOW OCHRE
PAYNE'S GRAY
BLACK
WHITE
IRIDESCENT WHITE
SILVER
GOLD
BRONZE
COPPER

4–5 ..... COLOR CHART
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Color swatches in this printed brochure are for representation only and may vary from actual Higgins® Acrylic Inks.

Higgins Acrylic ink's bold pigments and opaque metallics offer a full range of professional artist mixing inks. These pigmented inks offer unparalleled coverage along with lightfastness and waterproof qualities, making them perfect for many illustration, fine art, and mixed media applications. Their unique pigment build allows for mixing in the Munsell, Primary, and Process methods, and gives the artist full control over their color palettes. The artist-grade acrylic high flow base makes them compatible with a wide range of tools such as dip pens, airbrushes, paintbrushes, and empty acrylic markers.

SWATCH	COLOR NAME	PART NUMBER	PIGMENTS	LIGHTFAST RATING	WATER PROOF
	Process Yellow	44710	PY74	1	Yes
	Yellow Medium	44715	PY83	1	Yes
	Orange	44720	PY13, PR188	1	Yes
	Red Light	44725	PR188	1	Yes
	Red	44730	PR254	1	Yes
	Process Magenta	44735	PR122	1	Yes
	Purple	44740	PV23	1	Yes
	Ultramarine Blue	44745	PB29	1	Yes
	Blue	44750	PB15:1	1	Yes
	Process Cyan	44755	PB15:3	1	Yes
	Thalo® Green (Blue Shade)	44760	PG7	1	Yes
	Thalo® Green (Yellow Shade)	44765	PY7, PY13	1	Yes

SWATCH	COLOR NAME	PART NUMBER	PIGMENTS	LIGHTFAST RATING	WATER PROOF
	Sepia	44770	PY13, PB15:1, PR188	1	Yes
	Burnt Sienna	44775	PR101	1	Yes
	Brown	44780	PY13, PR188, PG7	1	Yes
	Yellow Ochre	44785	PY42	1	Yes
	Black	44790	PBk7	1	Yes
	Payne's Gray	44795	PV19, PY13, PG7	1	Yes
	White	44800	PW6	1	Yes
	Silver	44805	PW6, PW20		Yes
	Gold	44810	PW6, PW20		Yes
	Bronze	44815	PW6, PW20		Yes
	Copper	44820	PW6, PW20		Yes
	Iridescent White	44825	PW6, PW20		Yes

Besides the 12 basic colors for color mixing, the Higgins Acrylic Inks include:

ACRYLIC INK COLOR *Wheel*

The **Acrylic Ink Color Wheel** shows the placement of the 12 basic colors, the earth colors and black on the color wheel.

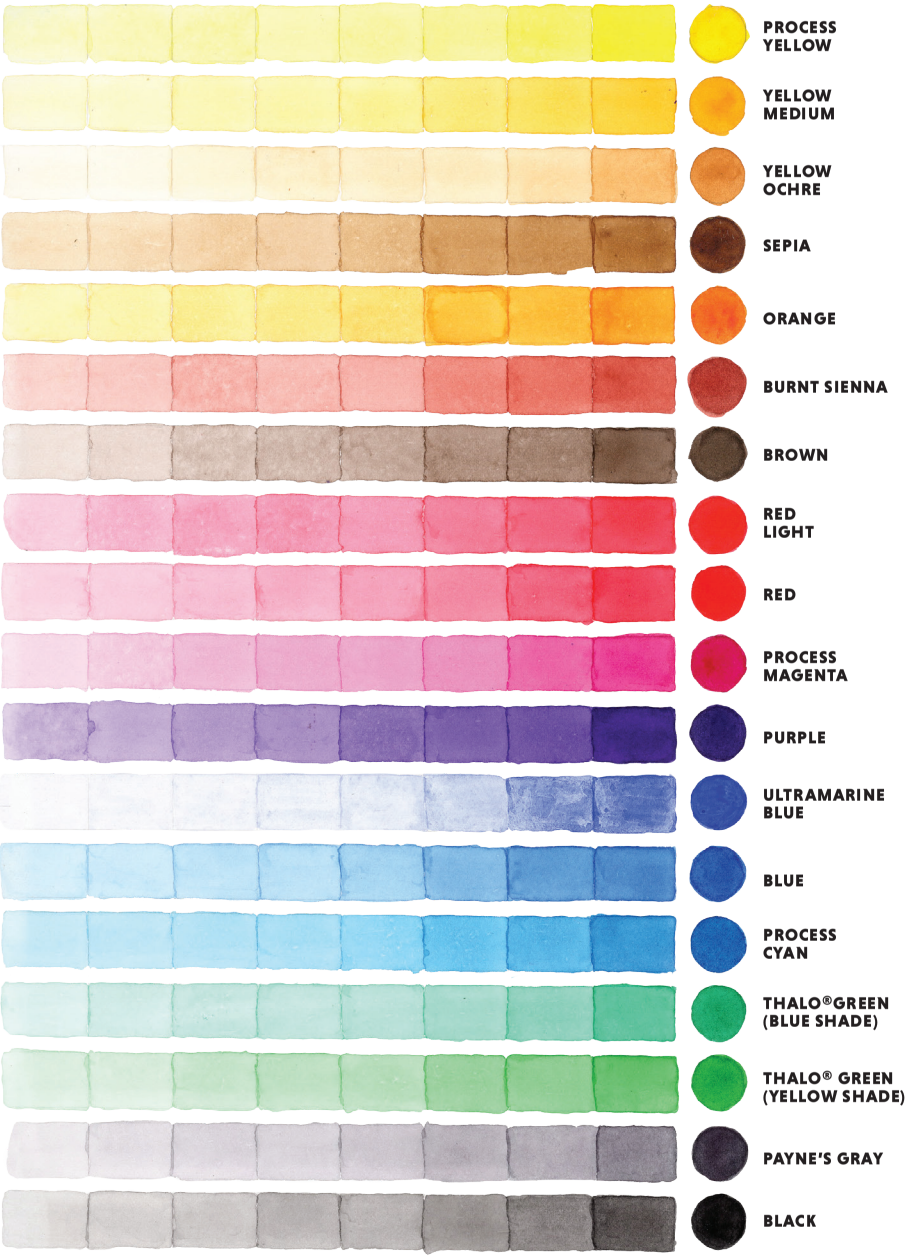
The Higgins Acrylic Inks can be diluted with distilled water to produce lighter values as shown in the **Ink Wash Chart.** This allows economical color mixes which will be explained later in this introduction.

Note:

FOR ALL COLOR WHEELS AND MIXING CHARTS, THE COLORS IN CIRCLES ARE THE HIGGINS ACRYLIC INK COLORS AND THE COLORS IN THE SQUARES ARE THE MIXES.

Drops of Water PER 1 Drop of Ink:

40 30 20 15 10 5 3 1



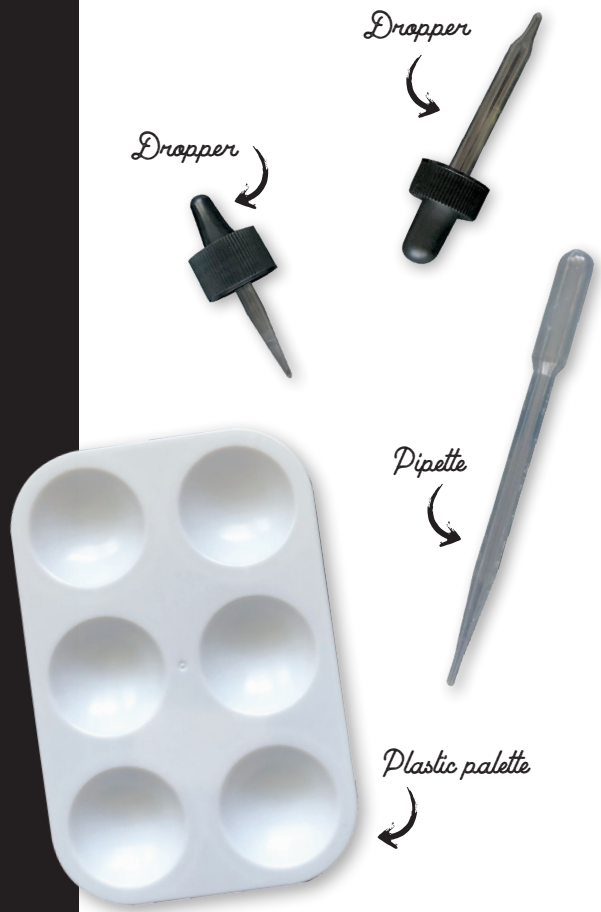
INK WASH Chart

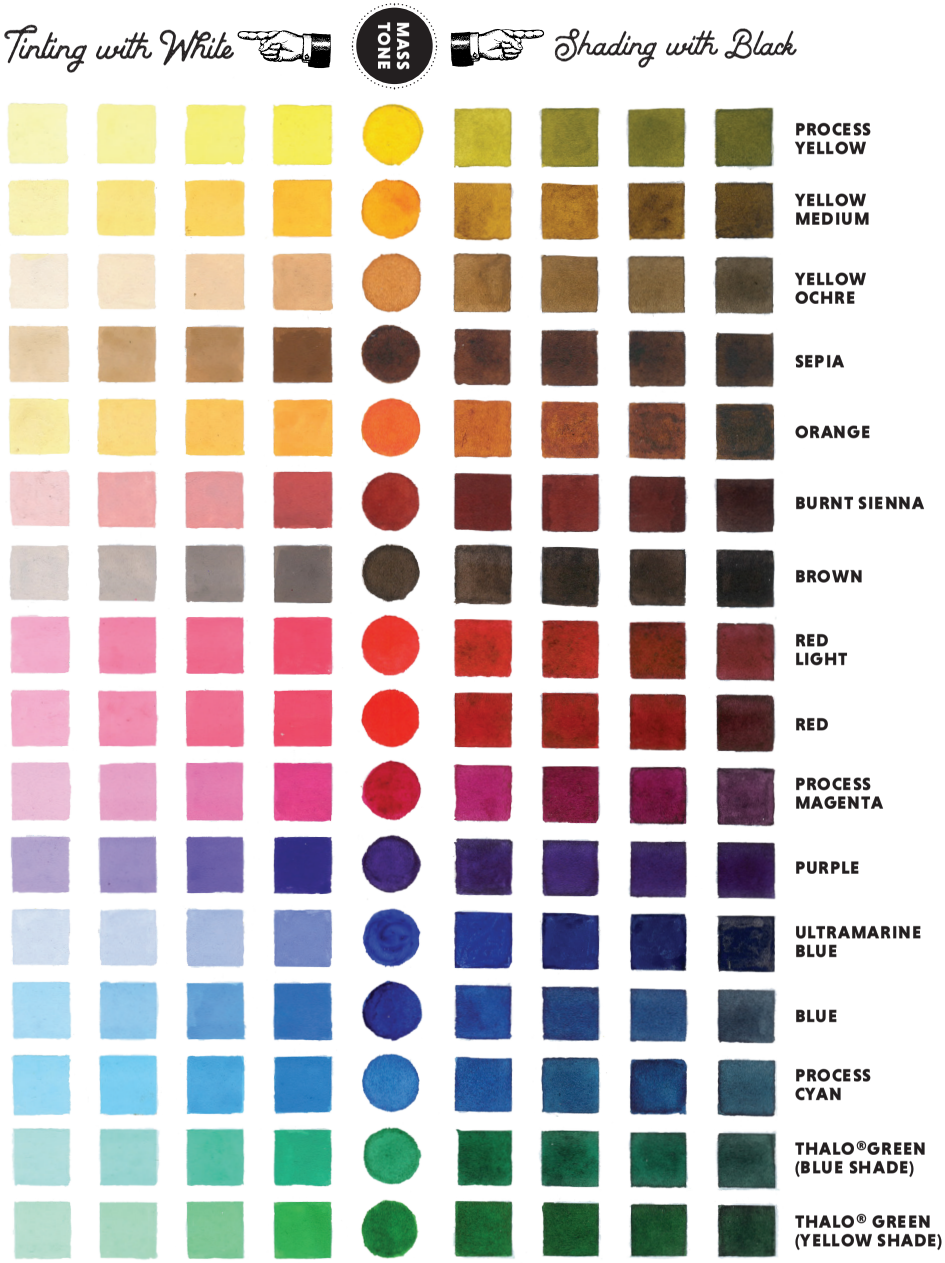
Color mixing

Tools: The ink bottle's dropper is used for color mixing to insure accurate and repeatable color mixes. For the best results always use the same type of dropper or pipette. Deep well plastic palettes are also very useful for color mixes.

Charts: We show the number of drops used for each color as a ratio. For example, a mix of 12 drops of Process Yellow and 1 drop of Process Magenta is displayed as "12:1" within the orange swatch. Colors shown in square swatches are mixes, while colors shown in circles are ink mass tones. A tint accompanies some swatches as a thin margin within the swatch box. This helps to determine the hue position and color temperature. Lastly, we show three color mixes in most of our charts; you can extend these to include additional color mixes, especially for the purples, greens, and earth tones.

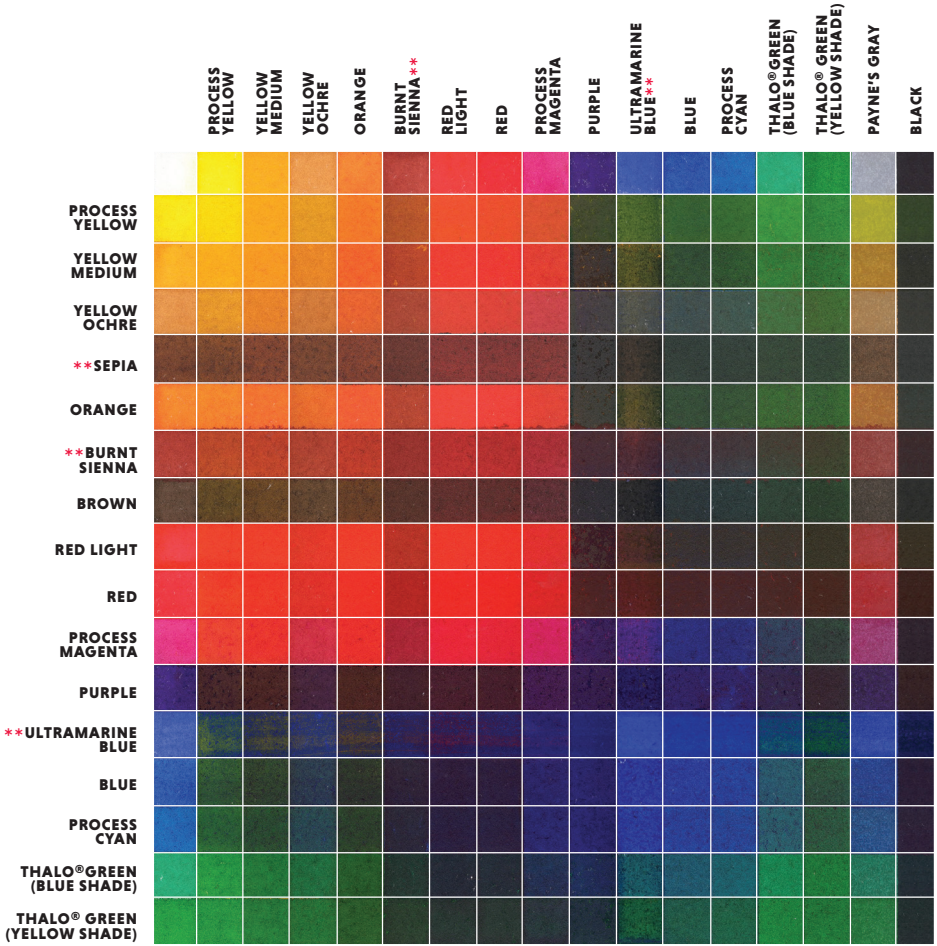
Tints and Shades: Also, White can be added to produce a tint and Black can be added to produces a shade as shown in the following **Tinting & Shading Chart**. The best way to learn about color is to mix color. Don't be afraid to experiment.





TINTING & SHADING *Chart*

TRANSPARENT COLOR OVERLAY *Chart*



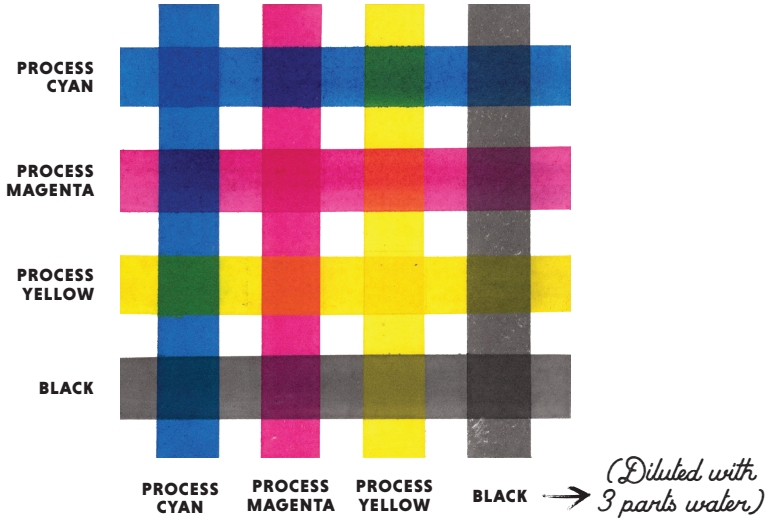
Since a majority or the basic colors and the earth colors are transparent (with a few being semi-transparent), colors can be layered one on top of the other. This technique is called glazing, and it produces a variety of optical color mixes as shown in the **Transparent Color Overlay Chart.**

Process

COLOR MIXING

For Process Color mixing the colors of the inks are appropriately named as Process Yellow, Process Magenta, and Process Cyan. On the **Process Color Mixing Chart** are the resulting secondary and tertiary color mixes using these Process Colors.

This palette is also known as CMYK (Cyan, Magenta, Yellow, and Black) when used for printing. In printing, the transparent process colors are laid one on top of the other to create colors. The following **CMYK Color Mixing Chart** is an example of this process. Colors can be used full strength or diluted with water to make them lighter in value much the same way watercolor is used utilizing the white of the paper for the light. For example, the black in the **CMYK Color Mixing Chart** is diluted with 3 parts water.



PROCESS COLOR MIXING *Chart*

CMYK COLOR MIXING *Chart*

Primary

COLOR MIXING

The colors used for the basic Primary Color mixing are Yellow Medium, Red and Blue. On the **Primary Color Mixing Chart**, you can see the resulting secondary and tertiary color mixes using these Primary Colors. White and Black can be added to these Primary Colors to produce tints and shades or if you want an opaque color. These colors can also be used as transparent color overlays or glazes as shown in the **Transparent Color Overlay Chart** (see page 10).

PRIMARY COLOR MIXING *Chart*

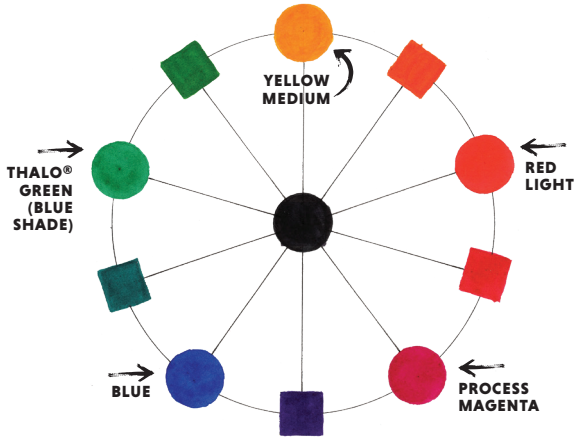
Munsell

COLOR MIXING

The Munsell Color Mixing System is an expansion of Primary Color Mixing. It was developed because the red, yellow and blue of the Primary Color Mixing palette was too limited and did not yield enough variation in color mixes. So, the primary palette was expanded to include a warm red, a cool red and a green.

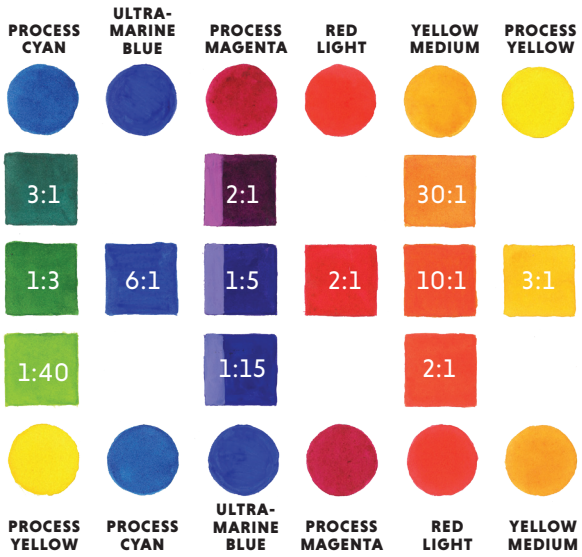
Unlike other palette color wheels that have 12 colors, the Munsell wheel has 10 (see the **Munsell Color Wheel**). The 5 colors included in the Munsell Color System are, Yellow Medium, Red Light, Process Magenta, Blue and Phthalo Green (BS). These 5 colors and their secondary color mixes are shown in the **Munsell Color Mix Chart**. The results give us the 10 colors on which the Munsell Color Mixing System is based.

Adding White and Black to this limited palette will yield tints and shades of the colors.

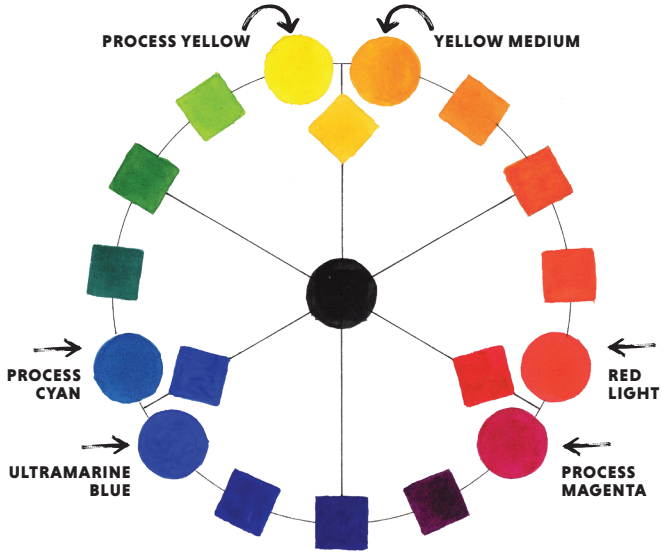


THALO® GREEN (BLUE SHADE)	BLUE	PROCESS MAGENTA	RED LIGHT	YELLOW MEDIUM
3:1	3:1	10:1	5:1	30:1
1:1	1:2	2:1	2:1	10:1
1:10	1:7	2:3	1:2	2:1
YELLOW MEDIUM	THALO® GREEN (BLUE SHADE)	BLUE	PROCESS MAGENTA	RED LIGHT

SPLIT WARM/COOL PRIMARY *Chart*



SPLIT WARM/COOL PRIMARY *Wheel*



Split Primary

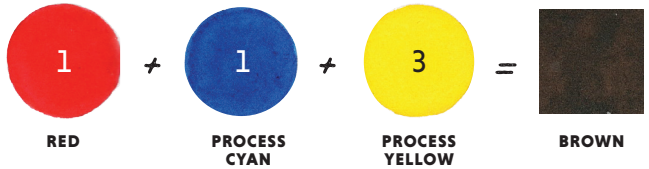
WARM/COOL COLORS

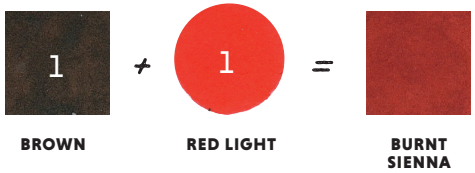
This palette of color is a combination of the Process and Primary Color palettes consisting of a warm and cool yellows, reds and blues. These six colors mix a range of intense secondary colors plus tertiary colors as shown in the **Split Warm/Cool Primary Chart**. You can see the placement of the colors and color mixes on the **Split Warm/Cool Primary Wheel**. In addition to these color mixes, other colors inside the color wheel can be mixed.

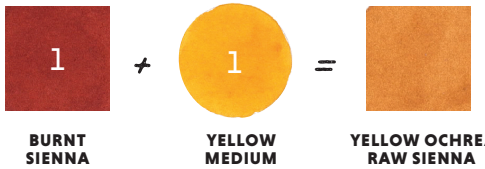
TAKE YOUR MIXING FURTHER WITH

Earth tones

Mixing red with green can give you various greens or earth tones, depending on the colors and ratios you choose. The more pigments added to the mix will yield more brown tones. See the **Earth Tone Mixing Chart**. Mixing Red into 1 Process Cyan and 3 Process Yellow will give you brown. Add Red Light to this mix will give you Burnt Sienna. Now try adding Yellow Medium to the Burnt Sienna you've mixed — you'll get a range from Yellow Ochre to Raw Sienna. If you add blue to the original brown you'll get Burnt Umber.







WORKING WITH THE

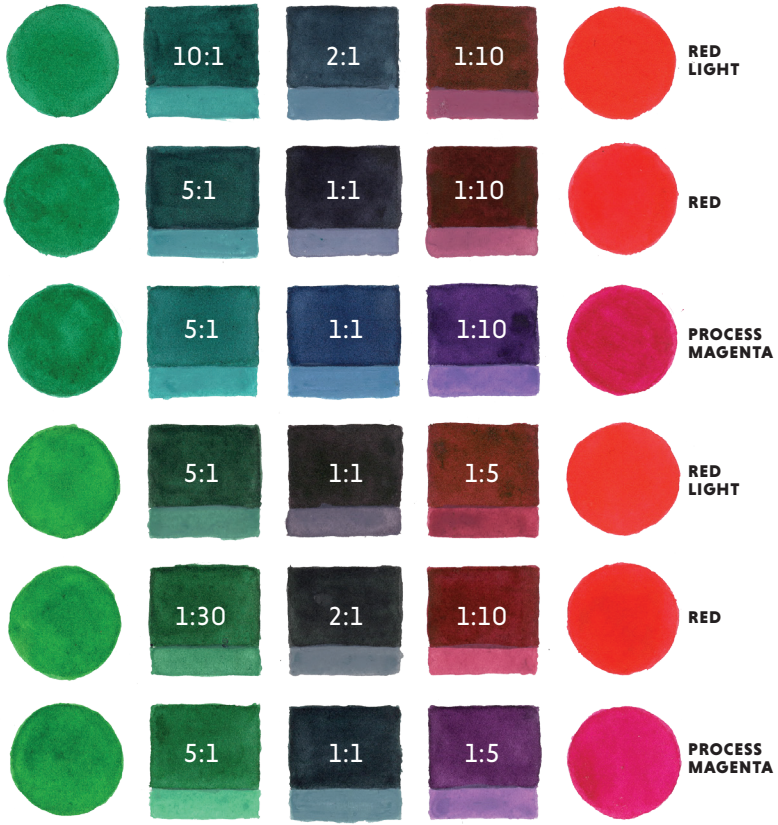
Greens

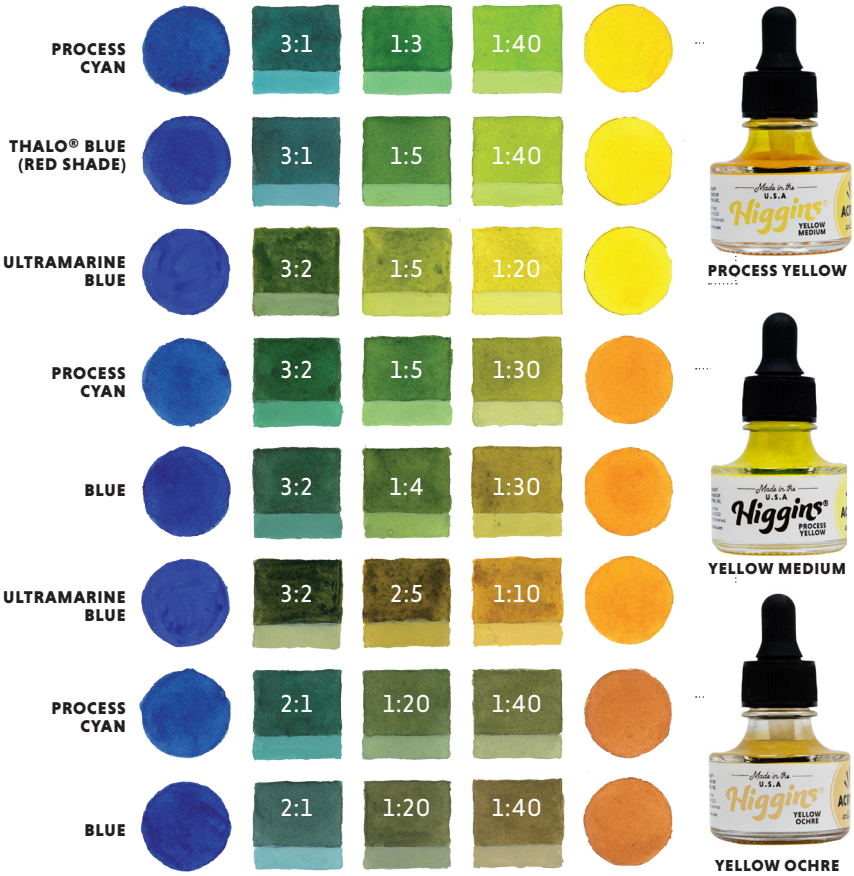
The Higgins Acrylic Inks include two greens. Thalo® Green Blue Shade (BS) and Thalo® Green Yellow Shade (YS) fall in line with our warm and cool selection of colors.

Like all of the other basic colors these two greens are very saturated. To neutralize them or lower the intensity they can be mixed with the compliment of green which is red. Since we have three reds, there are a lot of color mixing possibilities as demonstrated in the **Green and Red Mixing Chart**.

THALO® GREEN BLUE SHADE

THALO® GREEN YELLOW SHADE

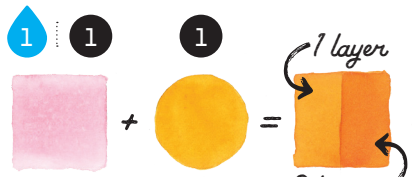


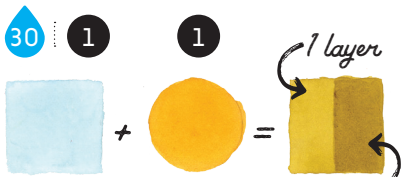


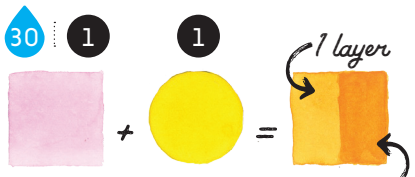
MIXING Greens

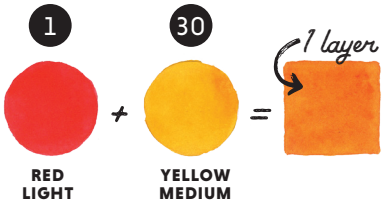
The Higgins Acrylic Inks include three blues and three yellows; therefore, an infinite number of greens can be mixed to meet your needs as shown in the **Mixing Greens Chart**. As mentioned in the section on working with greens, any of these mixes can be altered by mixing one of the reds, tinting with White or producing a darker shade with Black.

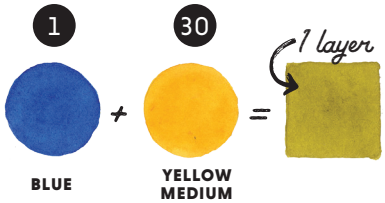
ECONOMICAL MIXING *Chart*

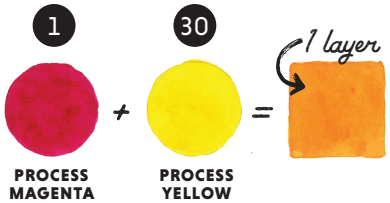












ECONOMICAL

Color mixing

You have probably noticed that some of the mixes require a large quantity of drops to achieve a mix. For example, it takes 30 drops of Yellow Medium and 1 drop of Red Light to mix Orange. For this example, here is an economical solution to achieve the Orange without using 30 drops of Yellow Medium. First, mix 1 drop of Red Light into 30 drops of water. Add one drop of this Red Light wash to 1 drop of Yellow Medium. It will yield a light orange. By adding another layer over the top of the first, the result is a vibrant orange of the same value as the original mixture. You can add additional layers of this mixture to darken the value. The **Economical Mixing Chart** shows this example as well as two others.

WHITE, IRIDESCENT WHITE &

Metallics

Besides the 18 colors which includes Payne's Gray and Black, the Higgins Acrylic Inks include several opaque colors including White, Iridescent White and the Metallics (Silver, Gold, Bronze and Copper). The Iridescent White and the Metallics are excellent for special effects. Any of the basic colors can be added to the Iridescent White to create pearlescent colors. The metallics stand on their own and compliment any of the colors or they can be used for underpainting with transparent washes of color added on top.

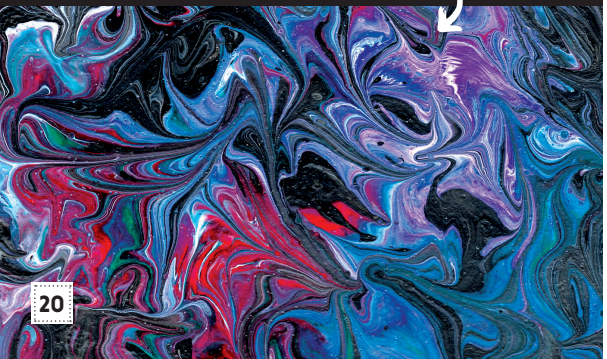
Experiment and have fun!

WORKING WITH ACRYLICS AND ACRYLIC

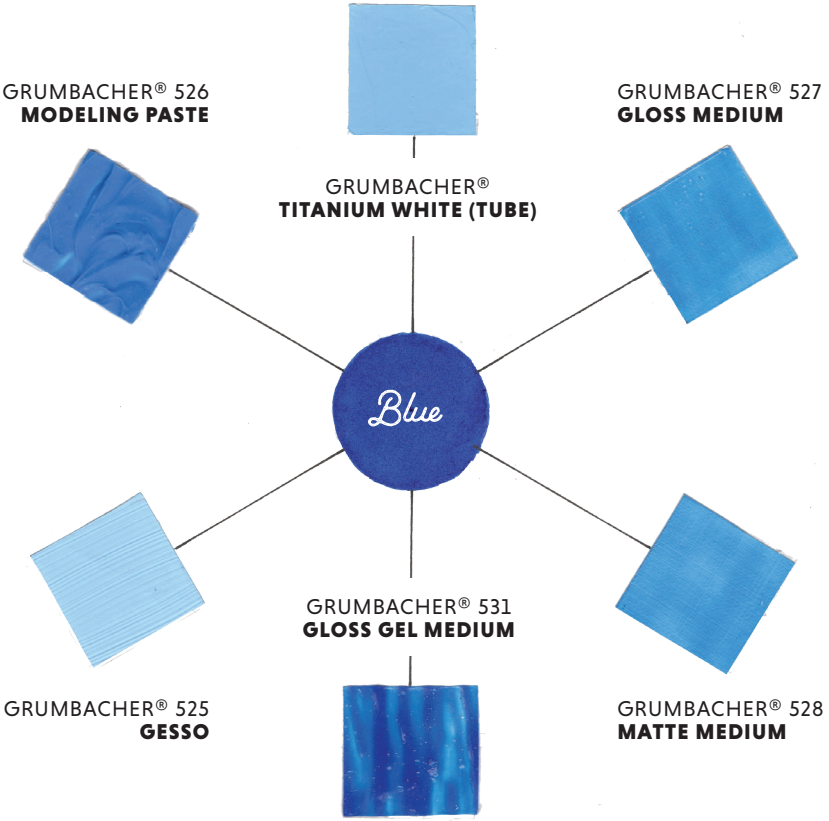
Mediums

The Higgins Acrylic Inks are basically a fluid acrylic and are compatible with most acrylics. Therefore, it can be mixed with tube acrylic, acrylic mediums such as gloss and matte mediums and gel mediums, modeling paste and pouring medium (Pour 44). The inks can also be used to tint acrylic gesso ground and clear gesso as seen in the **Medium Color Mixing Chart**.

Ink mixed with Pour 44



MEDIUM COLOR MIXING *Chart*



CHOOSING THE RIGHT Paper

Since most inking illustrations are done on paper, it is important to choose the right paper for optimum results. Papers have varying amounts of absorbency depending on the amount of sizing applied when the paper was manufactured. If the paper is too absorbent, the inks will sink into the surface resulting in poor color saturation. Always evaluate your paper prior to any inking project unless you have experience with a particular paper.

Visit

Higginsinks.com/resources

to download our
Guide to Evaluating Paper

For best results:

Use a smooth or vellum texture bristol, hot press or cold press watercolor paper, or a quality mixed media paper.

Brushes

Choosing the Right Brush

A word of caution: Never use a natural hair brush with acrylic-based inks or acrylic paints. Acrylics are alkaline and the natural brush filaments are acidic. They do not play nice with one another and consequently, you will destroy a brush needlessly. I recommend using a good quality synthetic brush for inking like the Grumbacher Goldenedge Watercolor brushes. Also, keep a separate brush reserved for black and the darker colors. This will prevent some of that annoying black residue from contaminating the yellow and red inks.

Cleaning Your Brushes

Since ink is very fluid, it has the tendency to flow up the brush filaments into the ferrule by way of capillary action. Water can be used to cleans brushes while you are working, but change your wash water often. At the end of you inking session, I highly recommend cleaning your brushes with Higgins Pen Cleaner. It will remove any ink that has dried in the ferrule of the brush. Rinse thoroughly under running water. Also, do not let your brushes soak in water. Another good practice is to use the dropper to dispense ink and avoid dipping the brush into the bottle.

Pigment

SETTLING

You may notice some settling of the pigments on the bottom of the bottle especially with the **earth colors, Ultramarine Blue, White, Iridescent White, and the Metallics.** Inks are fluid and this is normal. Simply shake the bottle of those colors vigorously prior to using. If the dropper becomes clogged use a needle to unclog the tip, or you can remove the glass dropper from the top and run under water. Once clean, reinsert it into the top.

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