



BLACK INK

Matching Your Ink to Your Technique

One of the most frequent questions printmakers ask us is: "How can I tell which Black ink is "right" for my work? **This newsletter is intended to help you select the Black ink that is most suited to your printmaking.**

When choosing an ink, the questions to ask are ones focused on printability. An ink needs to perform throughout the printing process and also to serve the final image.

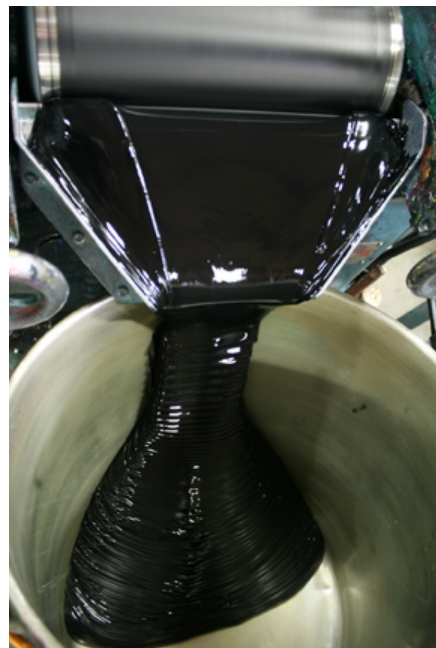
Many artists are used to inks needing modification with plate oil, tack reducer, or other additives each time they print. This often results in complex mixtures of ink and modifiers which can be difficult to replicate in future projects - and all just to be able to pull a decent print.

We believe the best recipe for a successful print, and for permanence, is to use inks that require little to no modification to print properly. By using an ink formulated specifically for your chosen technique, unnecessary customization, waste, and variables can be eliminated from the process. For this reason, we have formulated a line of Relief Inks in addition to our line of Etching Inks.

Whether you are using Gamblin inks, or those of another ink manufacturer, there are three considerations that can guide artists to the appropriate ink, in this case the appropriate Black ink, for their project.

- **Printing Method:** Are you creating a intaglio, relief or monotype?
- **Working properties:** How does it roll out? How does it wipe? Does it leave a lot or a little plate tone?
- **Color:** Does the final image need to feel warm or cool? Does it need to give a feeling of depth?

By considering how you need the ink to roll out (in the case of relief printing), how the plate needs to wipe and how much plate tone would benefit your print, it will become easier to choose an ink suited to your project. For simplicity, we will discuss *Working Properties* and *Color* within the context of each *Printing Method*.



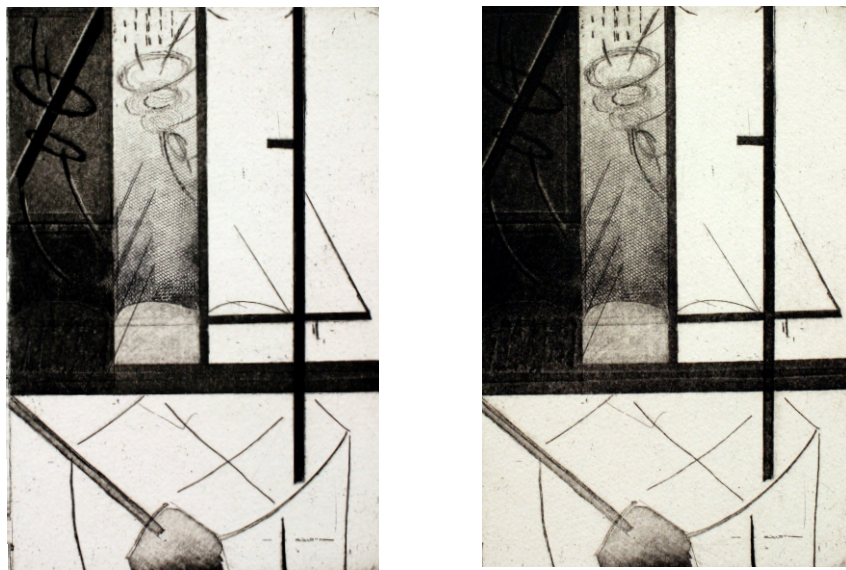
Inks for INTAGLIO: Etching Inks

We have developed five Blacks and Graphite for printmakers using intaglio printing processes. Gamblin Etching Inks are designed for printmakers who need a strong line and a great sensitivity to detail. Each black is designed to meet specific needs in both depth of color and printability.

Working Properties

With the wide array of techniques that fit under the intaglio umbrella comes the need for a range of working properties to accommodate them.

At a basic level, intaglio inks must be able to be wiped from the plate without pulling ink from the incised lines and the remaining ink must then transfer fully to the paper. Beyond this, there are a range of working properties to choose from. If an image would be best served by having strong contrasts in value, it may be ideal to use an ink that wipes easily and leaves very little plate tone. An ink with these working properties would be less ideal for a mezzotint, for which a stiffer ink is better suited.



Example of the same plate printed with two different black inks. Bone Black (L) wipes easily leaving less plate tone. Portland Stiff Black (R) stiffer ink leaving more plate tone. *Prints by Kazuko Watanabe.*

Color

Most black pigments are not perfectly neutral in color. In the masstone (lines or heavy rollouts) the color temperature is imperceptible, but each ink leaves a plate tone that is either warm or cool. These color differences, while subtle, can affect the overall look and feel of a finished print.

To illustrate, Bone Black and Carbon Black vary significantly in working properties; but they share a warm color temperature. While they are very strong blacks, the warmth can lessen the feeling of depth to some artists, so a more neutral or cool black may be a better fit.

Gamblin Etching Inks

The **Portland Black Inks** were developed specifically for edition printers who want inks with excellent working characteristics. They offer printmakers:

- deep rich blacks
- great sensitivity to line and detail
- total control of plate tone
- the most potential for subtle value shifts

Portland Black is formulated to wipe with ease, offers a moderate level of plate tone ideal for creating subtle value shifts, and still prints sensitive plates like drypoint beautifully. This ink will be the choice of those doing edition printing, and those working in schools that need an ink for general printing techniques. Portland Black is neutral in color. **Portland Cool Black** is cool in color with the same working properties as Portland Black. **Stiff Portland Black** is ideal for engravers, printers of mezzotints, or others who need more resistance from their ink.

Bone Black is a traditional black that is warm in color, wipes easily, and leaves very light plate tone. The combination of the light plate tone and easy wiping makes it less suited to works that require a subtle value range and ideal for work that requires strong contrasts.

Carbon Black is a silvery, dense black with a heavy plate tone. It is one of the most difficult black inks to wipe but remains in favor due to the strong, deep blacks it can produce. Like Bone Black it also has a warm plate tone.

Graphite makes prints look like pencil drawings – low contrast and a great sensitivity to the grey scale.

	Color	Wipe	Plate Tone	
Portland Black	Neutral	Easy	Moderate	Highly recommended for etching, drypoint, aquatint, mezzotint and engraving processes.
Portland Cool Black	Cool	Easy	Moderate	Highly recommended for etching, drypoint, aquatint, mezzotint and engraving processes.
Stiff Portland Black	Neutral	Moderate	Moderate	Recommended for etching, drypoint, aquatint. Highly recommended for mezzotint and engraving.
Bone Black	Warm	Easy	Light	Highly recommended for etching, drypoint, aquatint, mezzotint and engraving processes.
Carbon Black	Warm	Hard	Heavy	Needs additives to work well for etching, drypoint, aquatint, mezzotint and engraving processes.
Graphite	Gray	Easy	Heavy	Recommended for etching, drypoint, aquatint, mezzotint. Needs additives for engraving.

***Note: As printmakers develop their own preferences for the qualities of an ink that print their plates best, this chart should be considered a guideline.*



Ink for RELIEF Printmaking

Portland Intense Black is our black ink for all forms of relief printmaking. It rolls out smoothly, and easily transfers solid fields of color and fine detail from block to paper.

Working Properties

Many artists modify etching or lithography ink with oil, tack reducer, or other modifiers for relief printing. This route can be difficult to replicate through multiple studio sessions. In addition, the more modifiers that are added the less saturated the color will be.

For this reason, we developed Gamblin Relief inks to print dense, saturated color with little to no modification.



Woodblock by Jenny F.



Gamblin Relief Inks are formulated for all relief techniques, including woodblock, linocut, monotype. They contain the right amount of stiffness and tack to hold fine detail, yet spread evenly on the block. They also require far less inking of a block than most printmakers are accustomed to pull a quality print.

Color

Portland Intense Black is a deep rich black with a cool undertone. It is formulated with an extremely heavy pigment load, yet remains soft; making printing easier and faster.

If desired, the color temperature may be adjusted by adding other inks, such as Sepia to add warmth, or Prussian Blue to cool it further.

Inks for MONOTYPE and MONOPRINT

Either Gamblin Etching or Relief Inks can be used for monotype.

Etching inks work best for reductive techniques where the image is revealed by wiping or scraping ink from the surface of the inked plate. This is because etching inks are stiffer than a relief printing ink and inherently want to remain on the surface of the plate, which allows the artist to have more control over how much ink is removed.

When using an additive process, Relief Inks may be a better fit as they are softer than etching inks and will transfer even the faintest of ink tones. Relief Inks also work extremely well with a brush or knife.



Reductive monotype printed with Portland Black Etching Ink by Scott Gellatly

A NOTE ABOUT CUSTOMIZATION . . .

Depending on the printmaking technique and personal preference, there may be times when ink needs to be adjusted slightly with one of our modifiers in order to print perfectly. Temperature and humidity, the type of plate, and type of paper all affect how inks perform.



Burnt Plate Oils

Burnt Plate Oils are used to lower the viscosity of the ink. Burnt Plate Oil should be added to inks sparingly, as the detail of a print may be lost if the ink becomes too fluid. **Burnt Plate Oil #000** has less tack and is a good match for use with Gamblin Relief Inks. **Burnt Plate Oil #2** has a higher tack and is the primary oil binder for Gamblin Etching Inks.



Tack Reducer

Tack Reducer is a gel made from a very light drying oil, making it completely compatible with the inks. Small amounts added to ink will efficiently reduce tack. Tack Reducer is transparent to allow the intensity of an ink's color to be maintained.



Magnesium Carbonate

Magnesium Carbonate is traditionally used to stiffen ink. It will also reduce an ink's gloss level. Once added to ink, Magnesium Carbonate becomes transparent and will not alter the color of the ink. We recommend adding small amounts at a time; little is needed to add body to an ink. Mix well.



Gamsol

Gamsol, the safest 100% pure odorless mineral spirit available which enables printmakers to easily modify inks and is also great for studio clean-up, eliminating the need for stronger solvents. Gamsol is much safer because harmful aromatic components have been removed.

We hope the information in this Studio Note is helpful to you in your work. If you have any questions, please don't hesitate to [contact us](#).

The best part of our work is seeing the potential of our materials realized in your hands. We look forward to hearing from you and would be honored to work with you.



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