

# Gilding with Kolner Burnishing Clay and Insta-Clay

By Lauren Sepp

I've been asked many times by custom framing retailers if there is an easier way to water gild and burnish a surface, as it's generally agreed upon that traditional water gilding is a labor-intensive method. Kolner products address that demand by streamlining the water gilding process, which would otherwise include many more steps.

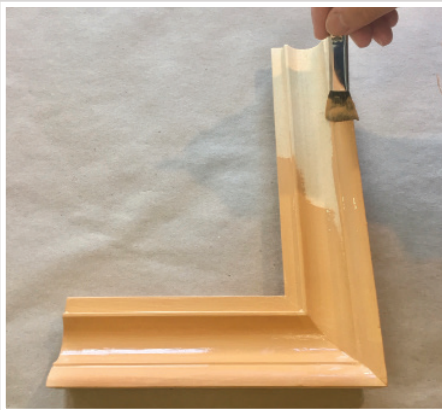
Kolner Products, based in Germany, formulated a water-based, single-layer, burnishable gilders' clay for water gilding in 1985 called Kolner Burnishing Clay. This product combines and replaces the glue size, gesso, and bole layers with a single product. The clay is premixed with an acrylic binder and only needs to be thinned slightly and stirred. There is no heating, dissolving of glues, or straining. There is also a sprayable version called Insta-Clay for the commercial gilding industry. Kolner Burnishing Clay is also used in the conservation field because it can be applied over any nonporous substrate and is reversible with acetone.

Both products are available in several traditional bole colors: red, yellow, white, black, and blue (Burnishing Clay only). All colors can be mixed together to

achieve different shades. The white Burnishing Clay can be tinted with Mixol tinting agents up to 5 percent by weight to achieve any color you desire.

Both the Burnishing Clay and Insta-Clay can be applied to many different surfaces. Certain nonporous substrates require no sealing before application of the clay: Plexiglas and other plastics, sealed woods, nonporous paints, and lacquered metals. Unsealed metals may require a primer. Smooth plastics and metals may require a light sanding to promote good adhesion. Porous surfaces such as matboard, paper, parchment, raw wood, textiles, unglazed ceramics, stone, plaster, traditional gesso and compo ornaments require a sealer before applying the clays. In many applications, shellac is a good all-around sealer. Always test for compatibility. Do not use Kolner Burnishing Clay over traditional water gilding without first applying a barrier coat of shellac, as the systems are incompatible over time.

Just as in traditional water gilding, apply yellow burnishing clay first and then red burnishing clay over the yellow for areas you wish to burnish.



**1** All surfaces should be smooth, clean, and free from dirt, dust, and grease. Prime surface if necessary and let dry. In this example, I've primed the wood sample with shellac.

**2** Apply the clay at room temperature. Stir the clay gently to avoid creating air bubbles. Decant the amount of clay you plan to use immediately. Clay should be thinned slightly with water: 7-8 percent by volume for Burnishing Clay and 10 percent by volume for Insta-Clay. For Burnishing Clay, a 100-ml. bottle needs about 0.25 oz. added water; a 500-ml. bottle needs 1.25 oz. water; and the liter requires 2.5 oz. water.

**3** Use a soft, natural-hair brush to apply the clay in long, flowing strokes in one direction. Allow each layer to dry thoroughly

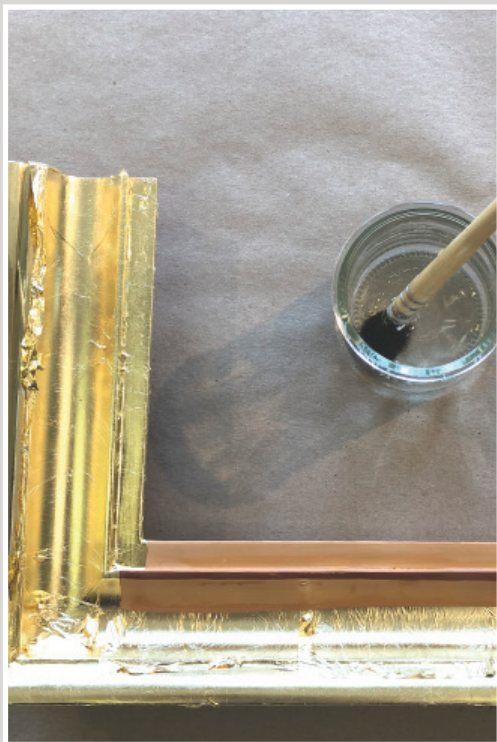
before the next coat is applied. The average drying time is about 30 minutes to one hour, depending on ambient humidity. The color lightens and is matte when dry. Apply a minimum of three coats. If you are using Insta-Clay, spray the first coat on thickly enough to achieve a uniform film covering the entire surface. A low-pressure, high-volume sprayer with a nozzle opening of approximately 1.5 mm is recommended. Apply two to three coats, waiting about 30 minutes between coats. To apply a different color clay for burnished areas, such as in this sample, it's best to apply the Insta-Clay with a brush; one to two coats will do.



**4** After applying the Burnishing Clay, you will need to sand the surface to remove any brush strokes. Where raised grain or drips are visible, sanding is recommended to smooth the surface between coats. Typically, after spraying Insta-Clay, no sanding is required between coats. After the clay is fully dry, it's time to sand the surface smooth. You can use a wet or dry method:

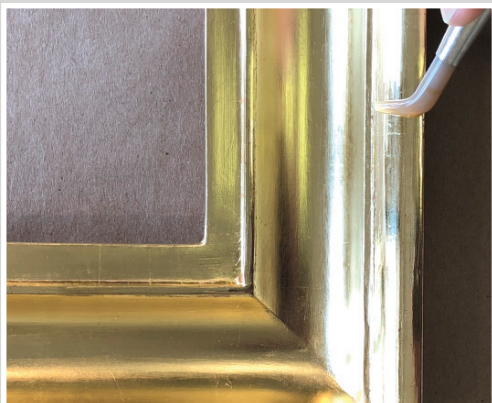
For dry sanding, smooth the surface starting with 320-grit aluminum oxide sandpaper and finish with 600 or 800 grit. Polish the clay with 0000 Liberon steel wool or a horsehair cloth.

For wet sanding—which I prefer, because it's faster and produces less dust—smooth the surface with 320 wet/dry silicon carbide paper and finish with 600–800 grit, dipping your sandpaper in a little water as you move along. Wipe off the slurry with a cloth and avoid puddling of water. When the surface is dry, polish the clay with 0000 Liberon steel wool or a horsehair cloth. You can also rub the surface with a little ethanol or denatured alcohol until the surface is smooth. Then rub the surface with a dry, lint-free cotton cloth. Allow the surface to dry for at least 30 minutes before proceeding.



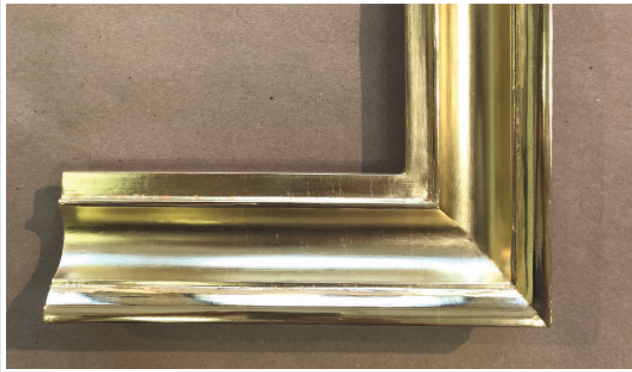
**5** Now you are ready to prepare your gilders' liquor for gilding. Kolner makes a glue concentrate called Colnasize. It's a liquid fish-based glue developed for Kolner clays. It comes in a squeeze bottle (keep refrigerated). Dissolve one teaspoon of Colnasize in two cups of lukewarm distilled water. Depending on climate conditions, such as low humidity, you may require a stronger concentration. If your leaf is not sticking to the surface well, you can increase the Colnasize up to two teaspoons per two cups of warm water. Always test concentrations until you are satisfied with the results before starting your project.

**6** Let's start laying leaf. Gilding with Kolner Burnishing clay/ Insta-Clay is similar to traditional water gilding, except that the clay wets less readily than traditional gesso and bole. Apply the first coat of liquor by flooding your surface. If you have any surface tension, you may add up to 10 percent denatured alcohol to the liquor solution. When the first coat is dry, repeat two to three times to wet the surface completely. After applying the third coat to the surface, while maintaining complete saturation, lay your leaf onto the surface. Apply the leaf rapidly while the surface is still wet. If there is no liquor on the clay, the leaf will not stick. Continue gilding until the surface is covered. If necessary, patch any "holidays" by applying liquor with a small brush to the surface and immediately laying a small piece of leaf.



**7** Depending on temperature and humidity, wait at least 1.5 hours before testing to see if the surface is ready to burnish. Best results are usually obtained when the surface is burnished within 24 hours. Burnishing is a magical, yet sensitive technique that requires careful observation and practice. This method involves applying gentle pressure with an agate burnisher in a polishing motion, which compresses the gold and the clay layers. You are aiming for a mirror-like reflection. If you try to burnish too soon, the leaf will pull from the clay, and/or will have a dull appearance. If you wait too long, the leaf will scratch. For this sample, I waited about two hours before burnishing. Kolner clays burnish beautifully with minimal pressure applied to the agate.





**8** Wait until the following day before rubbing or sealing the surface. Seal the gilding with a solvent-based topcoat for protection and toning purposes.

Some practice may be needed to master Kolner Burnishing Clay and Insta-Clay, but after a few test pieces, you will enjoy the benefits of traditional water gilding without dealing with soaking rabbit skin glue, and all those layers of gesso and bole to heat up and apply. You can use that freed-up time to have fun learning the diverse ways you can add patinas and special antiquing finishes to your gilding. Kolner products are available in the U.S. through Sepp Leaf Products. **PFM**



#### **Lauren Sepp**

Lauren, who is Vice President of Sepp Leaf Products, is the third generation in her family business which specializes in gilding products for the trade. After receiving her B.S. in Merchandising from the University of Delaware, Lauren joined the company in New York City, where it has served as a local and international resource for gold leaf and related materials for over five decades. She enjoys bringing

traditional and innovative products to market, and helping picture framers, the design trade, and artisans around the world create beauty with gold leaf.

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