



## 98154 Starter Set Water Gilding

### Köln KGGG System

**Sealer 123 A** 100 ml – 500 ml - 1000ml - 4L

*Impregnation agent*

*Sealer 123-A-* is a concentrated water-based sealer designed to prepare porous surfaces prior to application of *Köln Burnishing Clay* and *Sprayfond*. *Sealer 123-A* also serves as a protective coating over leaf metals such as silver or composition leaf.

**Application:** Dilute *Sealer 123-A-* with tap water in a ratio of 1 : 3 to 1 : 5. Ratio of thinning depends on expected absorbency.

Apply thinned solution with a soft brush or sprayer. Quantity of application depends on porosity of surfaces. In case of extreme porosity (like plaster or some soft woods) a **wet-on-wet** application is recommended.

If a glossy film is visible after drying, the solution was too concentrated or the number of layers too high! After drying only a satin sheen should be visible otherwise problems of adhesion or crackings of following layers of primer are to be expected. Allow sealer to dry thoroughly before applying any additional layers of *Burnishing Clay* or *Instaclay*. Drying time is approximately ½ to 1 hour.

**Additional uses:** *Sealer 123-A-* can be used as protective coating over leaf metals which tend to oxidize like silver or composition gold. Because *Sealer 123-A* films are not absolutely water resistant, this product is only designed for interior use. *Sealer 123-A* should be thinned with 20% to 50% with tap water. To avoid too much airbubbles, work with water-moistened brush and apply the solution slowly in one direction. One single layer is enough.

A colored overcoat serving as glaze will be made with *Sealer-123A*, +10% water and a dyestuff dissolved in pure alcohol. A wood stain may serve as a dyestuff. Up to 25% of a wood stain/alcohol solution should be added to *Sealer 123-A* concentrate.

### Köln KGGG System

**FOND** 100 ml - 500 ml - 1000 ml - 4L

*Burnishing Clay*

Formulated for brush application, *Köln Burnishing Clay* is a water-based burnishable gesso primer for gold, silver and composition leaf.

This product - available in 7 colors - is ideally suited for the creation of water gilded and burnished frames, interior architectural elements and furniture ornaments, to achieve a traditional look with less effort.

Advantages:

- combines the properties of gesso and bole in one pre-mixed, brushable solution; available in several traditional bole colors as well as in white, which can be colored with *Mixol* tinting pastes.
- is applied at room temperature
- due to the high solids content, only three or four coats are needed
- there is no limit on burnishing, and even composition leaf can be burnished.
- dries to a hard finish, comparable to traditional gesso
- can be thinned with water and contents organic solvent < 3%.



**Limitations:**

- though water resistant, *Kölner Burnishing Clay* is not waterproof and will swell if soaked; therefore use only on interior surfaces (use *Instacoll* for exterior applications).
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- susceptible to alkaline cleaners (e.g. containing ammonia, alcohol, acetone and other polar solvents).

**Properties:** mixing ratio: To ensure greater storage stability, *Kölner Burnishing Clay* is a thixotropic material, and must therefore be stirred thoroughly before use to convert it from gel-like viscosity to a more free-flowing consistency, comparable to an alkyd paint. Depending upon the intended use, it can be thinned with up to 15% water, by volume.

**Drying time:** Being water based, the drying time will be affected by temperature and relative humidity. Recoating can occur after the entire surface has lightened in color even though it may still feel cold to the touch. Under normal conditions, small objects can be prepared for gilding in half a day.

**Color:** *Kölner Burnishing Clay* is available in the traditional bole colors. All colors can be intermixed. If additional tones are desired, use *Mixol* tints but only with *Sorte -C-* (white). But do not add more than 5% by weight, otherwise some properties may be affected.

**Storage:** There is a shelf-life of at least 1 year at room temperature. To ensure maximum shelf-life, never return leftover solutions to original container! *Kölner Burnishing Clay* is freeze-thaw stable, which means that it will not be damaged should it have been frozen once during transport. Allow to come to room temperature, add a small amount of water and stir thoroughly.

**Application:** For satisfactory adhesion, surface must be dust, grease and corrosion free. Glossy surfaces should be sanded to ensure bonding. Substrates for *Burnishing Clay* include wood and wood products, plaster, composites, plastics and nonferrous metals. With some plastics and metals, a primer is recommended to assure good adhesion. Most porous surfaces require a sealant. *Einlaßgrund-P* was especially designed as sealant for *Kölner Burnishing Clay* and is recommended for all porous surfaces.

Thin material with 5% to a maximum of 15% with water. Using a good quality, soft bristle brush, apply the first coat liberally. After making sure that all surfaces are covered, smooth out brush strokes by going over entire surface with a thin coat, in the direction of the woodgrain. Await a lightening in color before applying a second coat. Where raised grain or drips are visible after the second coat has dried, sanding is recommended. Apply a total of 3 or 4 coats, allowing to dry in between coats.

**Sanding:** There is no substitute for careful sanding if blemish-free gilded surface is desired. After proper drying the surface can be sanded wet or dry. In either case high quality aluminium oxide- or silicon carbide paper should be used! Many prefer sanding wet, starting with 320 grit, moving to 400 and finishing with 600 grit, wiping off the slurry with a damp cloth in between. Avoid puddling of water! Final gentle polishing with alcohol moistened cloth will produce an absolutely smooth and well prepared surface. Whichever method chosen, do not try to speed the process by using cheap, coarse garnet paper or exerting excessive pressure. This only scratches the clay and removes too much of it, requiring recoating.

**Leafing:** Gild with leaf using *Colnasol Size*. Gilding is similar to traditional water gilding except that *Burnishing Clay* wets out less readily than traditional gesso - saturate your object section by section; re-wet immediately prior to laying the leaf, such that there is a thin film of *Colnasol Size* over the section.

**Burnishing:** The size under the leaf must be completely dry. Drying time depends on metal thickness, temperature and humidity. For more details about leafing and burnishing see directions of *Colnasol Gel Concentrate*.



## Kölner KGGG System

**Colnasol** 10 g  
*To produce 500 ml size for watergilding*

*Colnasol Gel Concentrate* is a quickly prepared size / adhesive available in concentrated tablet form. Dissolved in water, the gel tablets make a „gilder’s liquor“ designed for the adhesion of gold, silver and Dutch metal\* leaf to *Kölner Burnishing Clay* and *Sprayfond*. This product is integral component of the *Kölner System*.

Each tablet (10 gram) will make ½ liter of *Colnasol Gel Size*.

In addition to use for water gilding, the gel solution may also be used as a mixing agent for *Kölner Reliefkitt* in full or half concentration.

Store solution and undissolved tablets in a refrigerator!

**Directions:** *Colnasol Gel Concentrate* must be dissolved in hot tap water not below 50°C (122°F) and not over 65°C (150°F).

- Drop one tablet into a clean glass container holding ½ liter hot water.
- Stir until completely dissolved. The solution should be the color of cloudy water.
- Cool at room temperature before using!
- Apply solution with a soft hair brush 2 or 3 times to wet the surface completely.
- Instantly place pieces of metal leaf onto wet surface similar to the method of traditional water gilding. Never use patent metals.
- If necessary, use a small brush to apply size to „holidays“ and patch with small pieces of leaf.

Depending on temperature, thickness of metal and humidity, let the surface dry for at least 2 hours; longer for silver and Dutch metal. Afterward, burnish the gilded surfaces with an agate in the usual manner but using a lighter touch than used with traditional clay.

\* Dutch metal = composition metal needs a stronger solution: dissolve one tablet in 400 ml hot water.

Shelf-life of *Colnasol Gel Concentrat* is 9 months stored in a refrigerator.

Shelf-life of *Colnasol Gel Size* is several days, depending on temperature and hygienic circumstances.