

Kölner Instacoll system

Instacoll Base and activator

100ml-500ml-1000ml-5L

Highgloss gilding outdoors

Instacoll is a size for the attainment of a high gloss weather-resistant exterior and interior gilding. It can be used on nearly all substrates that have been prepared using standard accepted techniques to create weather-resistant surfaces. Do not use directly on glass outdoors. For indoor gilding it is sufficient to have or to prepare a non porous surface. A gage burnishing is not possible nor even necessary.

Before gilding *Instacoll* needs to be a completely dry film. This film will be activated with *Instacoll - Activator* prior to leaf application, preferably patend gold (transfer gold leaf). After activating the *Instacoll*-surface is now prepared that gold leaf adhere superbly with a maximum of burnish effect.

Application: Porous surfaces such as row wood, stone, plaster... should first be coated with a 15% water/*Instacoll* diluted solution. After ca. 30 minutes of drying this coating can be covered with a more generous, full strength layer of *Instacoll*. As mentioned above some materials in weathering need more than a simple pre-paint with *Instacoll* to achieve a weather resistant coating. - The rules of the craft of painting have to be strictly observed!

- Apply *Instacoll* with a soft brush or a sprayer. Dilute with water 5% to 10% if spraying.
- One or two evenly applied coats are sufficient. The last coat should be completely dry before applying the next layer.
- Wait at least 3 hours after application the last *Instacoll* layer.
- Activate the dry and tackless surface of *Instacoll* with *Instacoll - Activator Size* using a cotton rag moistened with *Instacoll - Activator*. Rub the moistened rag across the *Instacoll* film up to a very thin and even size film results. This „film“ must be sparse that drying results in less than 1 minute!
- Apply patend gold leaf immediately by pressing a cotton ball on the back of transfer paper. Continues gilding require always activating the next plane. Overlapped activating onto a just laid leaf enables a seamless gilded surface. Always let the *Activator Size* dry before applying the next leaf!
- After the entire surface is covered with metal, rub the surface with a cotton ball in one direction. Faults can be filled using the above method or by applying *Instacoll - Activator* as described below.

Loose leaf may applied directly if the gold is laid on the wet *Instacoll-Activator*. Therefore the size should be brushed thinly but repeatedly. Similar to traditional water gilding, the leaf is immediately laid on the wet surface. After the surface has dried sufficiently, the leaf should be pressed again onto the surface with cotton. The resulting shine is not so brilliant as with „dry gilding“ mentioned before.

Kölner KGGG System

Sealer 123 A

100ml-500ml-1000ml-5L

Impregnation agent

Sealer 123-A- is a concentrated water based sealer designed to prepare porous surfaces prior to application of *Kolner Burnishing Clay* and *Instaclay*. *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 : ½ to 1 : 1,5 . Ratio of thinning depends on expecting absorbeny.

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 expecting. 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 coat over leaf metals which tend to oxidation 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-moistend bruh and apply solution slowly in one direction. One single layer is enough.

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

Kölner KGGG system

FOND

100ml-500ml-1000ml-5L

Burnishing Clay

Formulated for brush application, *Kolner 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 creation of water gilded and burnished frames, interior architectural elements and furniture ornaments, to achieve a traditional look for 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 contains organic solvent < 3%.

Limitations:

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

Properties: mix ratio: To ensure greater storage stability, *Kolner 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: *Kolner 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! *Kolner 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 *Kolner 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 a 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

Instaclay

5L-30L

Burnishing clay for spray application

Instaclay is a modification of *Kölner Burnishing Clay* and formulated for spray application. Corresponding to *Burnishing Clay* is this product a water-based burnishable gesso primer for gold, silver and composition leaf. *Instaclay* is ideally suited for the production of water gilded and burnished frames, interior architectural elements and furniture ornaments, to achieve a traditional look for less effort.

Advantages:

- combines the properties of gesso and bole in one premixed, sprayable 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
- most properly prepared surfaces can be coated in two passes, due to the high solids content of *Instaclay*
- flows out well when sprayed, minimizing finishing
- there is no time limit on burnishing, and even composition leaf can be burnished
- dries to a hard finish, comparable to traditional gesso, enabling clean chopping of frame lengths with proper equipment
- can be thinned with water and contents organic solvent < 3%.

Limitations:

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

Properties: mix ratio: To ensure greater storage stability, *Instaclay* is a thixotropic material, and must therefore be stirred thoroughly before use to convert it from its 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: *Instaclay* 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). Do not add more than 5% by weight, otherwise some properties may be affected.

Storage: *Instaclay* has a shelf-life of at least one year at normal room temperature. To ensure maximum shelf-life, never return leftover solutions to original container! *Instaclay* 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 slowly, add a small amount of water, and stir thoroughly.

Application: For satisfactory adhesion, surfaces must be dust, grease and corrosion free. Glossy surfaces should be sanded to ensure bonding. Substrates for *Instaclay* include wood and wood products, plaster, compo, 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 a sealant for *Kölner Burnishing Clay* and *Instaclay* and is recommended for all porous surfaces.

Spraying: for most effective spraying, use a high volume, low pressure unit with a nozzle opening of 1,5 mm. If using a high pressure unit, use at 2 - 5 atmospheres pressure, with a nozzle opening of 1,5 - 2,0 mm. Thin *Instaclay* with 10 - 15% water by volume and mix well but avoid foaming.

Spray the first coat on thickly enough to achieve a uniform flow-out. Relative to lacquers, *Instaclay* is sprayed on thickly. Hold nozzle parallel and close to object. Having a moisten brush at hand is helpful to smooth out any runs or drips, especially on objects having intricate ornamentation. Await a lightening in color over the entire surface before applying second coat. In most cases no sanding is required between coats. Where raised grain or drips are visible sanding is recommended (240grit). Remove any sanding dust before applying the next coat. Spray a second and, in most cases, final coat. Important once again is the achievement of a uniform flow-out of a thick spray film, while avoiding runs or drips. For complex moldings a soft moistened brush can once again be used to smooth out any sags or runs. If the wood grain is still visible another coat is required.

Sanding: There is no substitute for careful sanding if blemish-free gilded surfaces is desired. After proper drying the surface can be sanded wet or dry. In either case high quality aluminium oxid or wet or dry silicon carbide paper should be used. Many prefer sanding wet, starting with 320grit, moving to 400 and finishing with 600, wiping off the slurry with a damp cloth in between. Avoid puddling of water! Final gentle polishing with an alcohol moistened soft cloth will produce a smooth 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. Allow to dry fully before proceeding - even alcohol requires half an hour before it is completely evaporated.

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

Burnishing: Before burnishing, the size under the leaf must be completely dry. The time will vary depending on degree of wetting, type and thickness of leaf used, and relative humidity. Test a small area before proceeding to avoid tearing the leaf.

For more details about leafing and burnishing see directions of *Colnasol Gel Concentrate*.

Safety: Always use standard safety precautions when spraying or sanding *Instaclay*. Ensure adequate ventilation and do not inhale dust or overspray.