(Kölner still produces the classic poliment base in several classic colours. You can find them by searching for Kölner Classic Poliment).

Especially for people who not often gild using poliment gilding the Kölner KGGG system is ideal. The system has been on the market since 1985 and is being used by, for example, furniture makers, icon painters and restorers.

Kölner KGGG is a complete poliment gilding system that can be applied cold and can be polished well in combination with gold leaf and silver. The system has been developed to provide a one-pot grounding as an alternative to the more traditional and time consuming way of poliment gilding. Clay base, size solution and poliment are not used anymore just like the repeated heating with the classic method.

### Poliment gilding with the Kölner KGGG system - Instructions

The system is carried out in 3 steps:

1 applying a sealer

2 applying a Fond in several layers

3 applying gold leaf or silver using a water gilding size

### Kölner KGGG system component 1: sealer 123A or Sealer P

Sealer P is ready for use. Sealer 123A is a concentrated solution which needs to be diluted with water. Sealer is a primer which needs to be used on porous surfaces like wood, plaster, mortar etc.

In the classic method the gilder would normally use bone glue solutions or shellac to reduce the absorption of porous surfaces. You can't use these in combination with the Kölner KGGG system. Instead you use the special Sealer 123A or Sealer P. The Sealer has a dual function; on the one hand it reduces the absorption of the surfaces to avoid the suction of the binder from the gloss gold primer into the surface which can cause adhering problems. On the other hand it has insulating properties; possible substances from the surface are being contained (make a tester when working with tropical hard wood). You can dilute the product with water according to the absorption of the surface. The Sealer normally is being diluted to the ratio of Sealer/water 1:3 /1:6. The water needs to be added slowly to the Sealer, bit by bit, whilst stirring continuously.



#### Please note:

After application of the Sealer a skin should never develop on the surface, after all it is a primer. If you do see the development of a shiny surface, you might get problems with the adhering of the gloss gold primer and you should lightly sand the surface with fine sandpaper. The drying time of the Sealer is around 2 hours, although we recommend leaving it to dry for 24 hours, to avoid all risks.

### Clean-up tools

Thoroughly clean your tools using water and soap. If this doesn't work because the material has already dried up you may want to use Ethanol.

### Kölner KGGG system component 2: fond

The Fond is a product with a high level of solids and is made up of acrylic resin, types of clay, chalk and pigment. This product can be applied cold and can be used as well as a chalk base as a bole/poliment layer. An easy to use one-pot system with extraordinary filling capacities.

### Usage of de Kölner Fond colours

All colours can be mixed.

**B. Poliment** (bole) red & Bi poliment red dark Applied where the original bole/poliment colour is essential, for example on gilded mirror and painting frames. It gives the gold leaf a warm hue.

#### O. Ochre

A somewhat neutral colour underneath gilding, it less influences the gold colour. Small damages or tiny gaps in the gilding are less visible.

#### L. Yellow

Will make the gilding look a little brighter which will give it a cool appearance.

#### E. Blue

Applied with gold leaf and leaf silver and will give a cool appearance.



#### S. Black

This colour is used to give leaf silver a beautiful appearance.

#### C. White

Applicable with gold leaf and silver leaf and I also used as gesso for icons.

## Apply Kölner Fond with a brush.

Kölner Fond always needs to be stirred well before use! Apply a minimum of 4 layers. After every layer Kölner Fond needs to dry for around 1½ - 2 hours. Dilute the product with a minimum of 5% water. Apply the mixture with a soft brush. We advise Kölner Toray brushes. Apply a generous layer of Kölner Fond. When you apply thin layers you might be able to see brush strokes after the drying time. When working on wood you might want to lightly sand the surface after the first layer to remove wood fibers that got erected by the moisture in the Kölner Fond. Don't sand in between the following layers. The total of the added layers needs to be a minimum of 150μm. Make sure sharp edges get covered enough. If necessary you can add a final, highly diluted layer of Kölner Fond, purely to get rid of brush strokes.

After the application of the final layer it can be polished by using a lint-free cotton cloth, moistened with ethanol (alcohol). You can also use water but then the polishing takes longer. Only moisten the cloth, definitely don't drench it. When the cloth is too wet you might remove too much of the Kölner Fond. By polishing the surface with reasonable pressure a thin layer of the base will dissolve while the rubbing movement creates a smooth surface. By immediately rubbing with a cotton cloth the surface will become very smooth and shiny.

## Apply Kölner Spray fond with a spray gun

Kölner Spray fond is specially developed to apply with a spray gun. Kölner Spray fond is used frequently by professional frame and furniture makers. A number of well-known icon workshops and producers of icon boards/panels have been using Kölner Spray fond successfully for years. It is a product with a high level of solids which means the necessary thickness of the layer (150  $\mu$ m) is usually reached in two layers of spraying. Use a low pressure spray gun with a nozzle of 1½ mm. Kölner Spray fond is processed with a viscosity of 25 sec. (din-cup 4mm 20°C). Dilute with water. Drying times and further application are the same as Kölner Fond. The colours are the same as Kölner Fond colours.



### Clean-up tools

Thoroughly clean your tools using water and soap. If this doesn't work because the material has already dried up you may want to use Ethanol.

## Kölner KGGG system component 3: Colnasol gel concentrate

In traditional poliment gilding the size was already processed in the bole/poliment layer. With the Kölner KGGG system the size is being processed in the gel/water size. This product Colnasol is a concentrated mixture of several animal sizes and is diluted with water. The principle of poliment gilding is that you use loose gold leaf or silver leaf you cut to size on a gilder's cushion. Apply the gold leaf with a gilder's tip onto the wet layer of gel concentrate. This wet layer always needs to be a closed film because on areas where the product has already dried the gold leaf will not adhere properly. This is something you often only notice when burnishing with an agate polisher.

To dilute Colnasol in warm water you need to continuously stir at a temperature of around 55/65°C. The mixture needs to cool to room temperature before you can apply it to the surface. You can only store diluted Colnasol in the fridge for a few days because it does not contain any preservatives. You can freeze it in an ice cube tray.

The mixing ratio for gold leaf and silver: 1 tablet (=10g) to 500ml water. For gold leaf you might want to use 600ml water. This will produce an ever greater luster. The mixture ratio for imitation leaf metal is: 1 tablet to 400ml water. For smaller quantities you can easily cut a tablet with a sharp knife but make sure not to touch the tablet as it perishes quickly.

### Cleaning the tools

Thoroughly clean your tools with water and soap

