



Burnishing Gold 70-013-000 (L13)
-Yellow for porcelain, liquid for brush applications-

Burnish gold

information leaflet



General information burnishing gold

Burnish preparations contain precious metal or precious metal compounds in solid, dispersed and dissolved forms, adhesive agents, as well as resin solutions as film formers. The burnishing gold preparation is lead, cadmium and mercury free.

Decorations produced with burnishing gold result in dull, brown surfaces after firing. Only after burnishing with a glass fibre brush, sand, agate etcher or similar auxiliary material the typical silk matt brilliance arises.

Besides this optical effect, burnishing leads to compression of the precious metal particles in the surface and therefore to a distinctive improvement of the abrasion resistance. As a rule, decorations produced with burnishing gold are more abrasion resistant than bright precious metal decorations.

The burnishing gold can be applied without thinning. As a rule, the viscosity increases with the storage time. The preparation has a settlement of the matting agent. **Before using the burnishing gold needs to be shaken.**

The burnishing gold should be stored at room temperature (approx. 20°C/70°F)

Storage at 7-14°C/45-57°F reduces the increase of viscosity during storage.

Firing Range:

| | |
|----------------|----------------------------|
| Porcelain | 780(1440) - 880°C (1620°F) |
| Bone China | 750(1380) - 880°C (1620°F) |
| Vitreous China | 750(1380) - 850°C (1560°F) |
| Eathenware | 650(1200) - 740°C (1370°F) |

The burnishing gold is dishwasher durable, to be regarded as approximate values. Testing results vary widely according to the type of dishwasher, washing programme, washing up detergent, water quality and firing conditions. The manufacturer (Heraeus) tests whether finished decorations are dishwasher durable, roughly following the test-washing programme of the Technical Standards Committee for material testing in a Miele continuous dishwasher.

If a decoration withstands 500 washing cycles essentially without damage, it is designate as diswaher durable.

“Before using the burnishing gold needs to be shaken”

To fill you in on the background, both burnishing gold and silk matt gold are a suspension of dence, heavy particles all trying to fall out of solution to the bottom of the phial. After a short time you will have a thin mix at the top and a heavy sludge at the bottom. Over a few weeks time the sludge turns to a thick goo and then becomes as hard as toffee and really sticks to the bottom of the phial.

It sounds serious but all the gold is still present and can easily be reconstituted. Trying to add a couple of drops of thinners and stirring with a cocktail stick or a very small palette knife is a possible fix, but even if you succeed how do you then evenly load your brush and check that the consistency is as required?

Incidentally you won't experience this sedimenting problem with **bright golds** or **shiny platinum** as they are solutions

containing no solid particles. Over time they will thicken up too but can more easily be restored to a “workable viscosity” by stirring in drops of gold thinners.

If *burnishing gold* or *silk matt gold* is “too wet” when applied and does not contain enough of gold suspension, it will fire with patchy pink or bright gold areas. Only the central areas may vaguely resemble the required duller rich gold look.

Recognising “workable viscosity” and having your brush loaded with gold all of the same consistency is the key. An interesting point here is that regardless of the percentage rating of the gold, after firing all golds fire close to pure 24 carat and that burnishing gold with its alloy additives has a slightly lower carat than bright gold.

The following method works best for us. Always bear in mind that just because someone has been doing something a particular way for a long time doesn't make it right so always question and vary your techniques.

How to prepare Burnishing Gold L13 or 70-013-000



You will need your phial of gold, an egg cup, a small bottle of M19 thinners clearly marked “for use with L13”, a pipette, your gold brush and some cling film.

1. Pour out as much of the L13 as possible into a small round bottomed container, such as an egg cup (#1).



#1



#2

2. Add about 10 drops of M19 thinners from a pipette to the phial (#2), screw on the top and shake for about 30 seconds (#3) which should dissolve the remaining gold into solution, tip out into the egg cup and check that no “thick” gold is still lurking at the bottom of the phial. If so, add more M19 thinners, shake and pour out contents again into the egg cup. Now leave the egg cup on a radiator or somewhere warm until the liquid becomes about viscous as washing up liquid. To speed up the drying process you can use a hair drier on **a low setting** being careful not to blow gold out of the pot!



#3.

3. Moisten your brush with the M19 thinners from the little bottle, which is now reserved solely for use with L13. Load the brush up to the throat with gold mix and then “paint” up the inside wall of the egg cup. The gold paint should not be wet and watery but should run slowly down the inside wall of the pot.



#4.

If you have judged the viscosity correctly you are ready to paint on your china. The gold should flow easily from the brush (#4). If it drags and breaks up the mix is too dry (#5). If too wet it will spread and your brush stroke will lose its definition (#6). So you may have to add a drop of thinners to the pot or leave a few minutes to dry a little. Once you are gilding away, you will begin to feel the gold thickening and pulling a little so you just add a couple of drops and stir in with your brush to loosen the mix.



#5.



#6.

4. After you have finished gilding, return as much of the gold back in the pot from your brush by pulling over the rim (#7). Then wash out your brush in the small bottle of thinners reserved for the purpose. Cover the pot with cling film.



#7.

5. The next time you use, moisten and soften your brush in the M19 and mix in a couple of drops of the M19 with your brush to re-establish the correct painting consistency. If you don't use for several month the mix will solidify. Don't panic! Just add a few drops of thinners, leave for a few minutes and then gently work back into solution using your brush.

6. Try and avoid gold running down the outside of the pot (#8). If this happens wet your clean brush in M19 and use it to take off the gold (#9) by sweeping upwards and then return the enriched thinners either back into the pot or into the thinners bottle.



#8.



#9.

In this way no gold is ever wasted because you can always evaporate off the thinners and paint with the resulting gold. **Never wipe your brush out on a tissue as all the gold will be lost - keep it in solution in the M19 thinners.**

8. After firing to about 760°C on china or 780°C on porcelain take a wet sponge and pick up a little (76-0130) burnishing sand (#10). Gently burnish and enjoy the emerging rich finish of pure gold (#11).



#10.

#11.



Text: Chris Balmforth and Anne Hoom
Photo's: Chris Balmforth and Sidney de Vries
© Held-Holland