relief

RELIEF H 54002 LEAD FREE for decal printing

Heraeus Precious Coatings is a global manufacturer of precious metal decoration products for ceramics and glass. Heraeus profits from over 100 years experience in ceramic and glass decoration designs, which has always made the department a pioneer in the development of precious metal colours. Modern precious metal preparations have to meet high demands on different types of substrates – such as on porcelain, tiles, drinking glasses, flacons and bottles. Decorations have to achieve good mechanical and chemical resistance such as dishwasher durability.The products supplied by Heraeus Precious Coatings include: Bright gold and platinum products, silk-matt gold and platinum products, burnish gold and platinum products, lusters and metallo-organic preparations for technical use.

1 General information

H 54002 is a lead free special bright relief designed for the Heraeus Two Fire Etching Imitation System for porcelain. In an original etching decoration first parts of the substrate glaze need to be removed by using hydrofluoric acid. In the second step the precious metal gets applied. At the lower parts, where the glaze has been removed, the bright precious metal shows a silk matt appearance, on top of the glaze a bright appearance. The Heraeus Two Fire Etching Imitation System allows to produce a similar optical effect without the need to work with aggressive acid. In the first step a decal is produced consisting of a special underlay and a bright relief on top. After the firing of the decal the liquid precious metal is applied on top. The first picture shows a decoration with a single layer of bright relief H 54002, the second picture the same motif with a double layer of relief.

2 Standard firing range

Substrate	Firing range [°C]
porcelain	800-830

Directly to the product:

Click

relief

RELIEF H 54002 LEAD FREE for decal printing

3 Properties of the product

3.1 Storage

H 54002 is a lead free flux powder. The material should be stored in a dry environment.

4 Application of the material

4.1 Recommendations for the usage

- For the pasting of the bright relief H 54002 we recommend a mixing ration of 100:80 parts by weight (bright relief : silkscreening oil) with special silkscreening oil.
- For a good homogenization the pasted underlay should be homogenized with a triple role mill.
- For the printing of the bright relief we recommend the usage of a 68-55 polyester screen or a 180-220 stainless steel screen.
- For more detailed information on the decoration system, please check our Product Information Sheet for the Heraeus Tow Fire Etching Imitation System for porcelain.

5 Safety data information

For safety data information please check our Safety Data Sheet for Underlay H 54002.

Contact
Heraeus Tokmak A.S. | Kemalpasa O.S.B. Mah. 37. Sok. No:6 | 35170 | Izmir | Turkey | +90 232 8772 410

The statements concerning our products correspond to our current knowledge and experience. It is the obligation of the purchaser to examine the usefulness of the products in its intended use in each individual case. In order to prevent production losses the user has to test the preparations in connection with every other material being involved in the production process and has to be satisfied that the intended result can be consistently produced.