relief

RELIEF H 55090 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 55090 is a lead free special bright relief designed for the Heraeus One 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 One-Fire-Etching-Imitation-System allows to produce a similar optical effect without the need to work with aggressive acid. It is a decal system consisting of a special white underlay which creates a matt surface, plus a bright relief for a raised effect and the special bright metal paste on top.

2 Standard firing range

Substrate	Firing range [°C]
porcelain	800-820

Directly to the product:

Click

relief

RELIEF H 55090 LEAD FREE for decal printing

3 Properties of the product

3.1 Storage

H 55090 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 55090 we recommend a mixing ration of 100:55 parts by weight (bright relief : silkscreening oil) with special silkscreening oil No 238/3.
- For a good homogenization the pasted underlay should be homogenized with a triple role mill.
- Please prepare the materials always fresh for a printing job.
- Important note! Do not print special underlay + relief decals on stock. It is not possible to store decals printed with a special underlay/relief in order to print the bright gold paste at a later time. The complete decal needs to be freshly printed as explained above.
- For the printing of the bright relief we recommend the usage of a 230 – 300 mesh stainless steel screen. On top of the bright relief the later printed bright precious metal paste will show – after firing – a shiny bright finish.
- For more details about the Heraeus One Fire Etching Imitation System please check our Product Information Sheets for the Heraeus One Fire Etching Imitation System for porcelain.

5 Safety data information

For safety data information please check our Safety Data Sheet for Underlay H 55090.

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.