



## Liquid Marble Coatings and Marble Pastes for Lustre and Gold Decorations

### 1 General Information

Marble coatings consist of water/alcohol solutions and a system of bonding agents, which cause marble effects after the application and firing on lustres or bright gold preparations. The marble effect achieved depends on the coating used (see Product List, item 4). The intensity of the decoration effect depends on the layer thickness of the lustre used and the soaking time of the marble coating before firing the decorated item.

The craquelure decoration effect arises mostly during the firing period. After application and the necessary soaking time, a marble effect is visible before firing only with the coatings A-N/B 491, E-N/B 203, G-N 205 and K-N/B 207.

For use on gold surfaces the special marble coatings E-N/B 203, F-N/R-204 and K-N/B 207 are available.

### 2 Application Recommendations

#### 2.1 Brush Application

- Apply the lustre by brush or spraying.
- Dry the lustre (dry to touch).
- Apply the craquelure solution in an even, medium layer.
- Drying. In case the drying period is too long or too short, a craquelure effect will not be visible. The optimum drying time has to be determined by tests under individual conditions. A drying period of 1-2 hours according to the lustre used has proved to be ideal.
- Fire the decoration.

#### 2.2 Direct Screen Printing

Marble coatings for screen printing can be applied on liquid lustres as well as on lustre pastes.

- Apply the lustre. The liquid lustre can be applied by brush or spraying. For printing the lustre paste we recommend the use of a 100-48 up to 130-34 (250-330 mesh) polyester screen.
- Dry the lustre (dry to touch).
- Print the marble paste. We recommend the use of a 43-90 polyester screen.
- Drying (see point 2.1).
- Fire the decoration.

#### 2.3 Manufacturing the Decals

In principal, decals can be produced with the lustre pastes and the ready-to-use marble paste.

- Print the lustre paste with a 100-48 up to 130-34 (250-330 mesh) polyester screen.
- Dry the lustre (dry to the touch).
- Print the marble paste. We recommend the use of a 43-90 (110 mesh) polyester screen.
- Drying (see point 2.1). Pay attention to a constant drying period and constant drying conditions from sheet to sheet, if a comparable marble effect is to be achieved on each decal.



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.

- Print the screen-printing covercoat L 406 with a 32-120 polyester screen.

The following aspects should be taken into consideration for the production and processing of decals:

1. The drying time and drying conditions of the marble coating have to be kept constant from sheet to sheet, if the decals are to be produced with a comparable marble effect.
2. **The decals should be soaked in water for just a very short time before application onto the object. If they are soaked too long, the water based marble coating will be attacked and dissolved. A simultaneous soaking of several decals – as commonly practiced – is therefore not possible!**


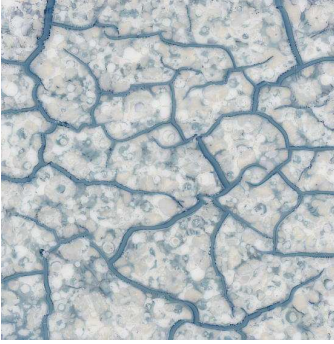
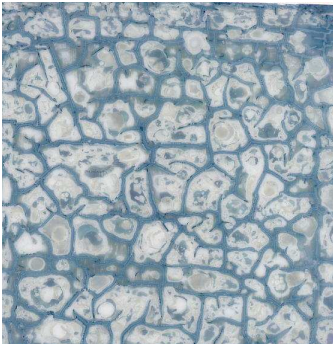
### 3 Thinning

Marble coatings are supplied ready to use, therefore further thinning is neither necessary nor recommended. In principle, they can be thinned with water or alcohol. Too much thinning neutralizes the craquelure effect of the solution.

### 4 Products

All marble coatings cause different marble effects (see below).

#### 4.1 Liquid Marble Coatings

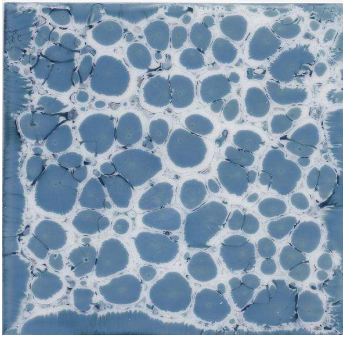


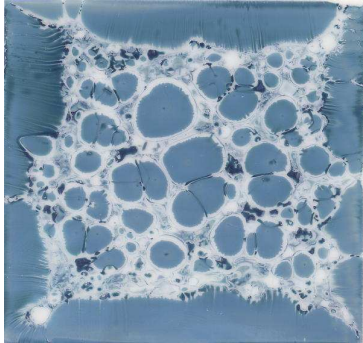
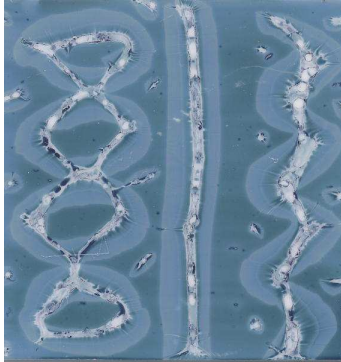


<b>K-N/B 207</b> Formation of strong vein designs.	<b>A-N/B 491</b> Vein formation is less intense than K-N/B 207.	<b>E-N/B 203</b> Vein formation is very small.
		

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.

**Technical Information Nr. 2.6/4**

**Heraeus Precious Metals GmbH & Co. KG**

Business Unit Precious Colours  
Heraeusstraße 12-14  
D-63450 Hanau  
Phone: ++49 (0) 6181 35 4420  
Fax: ++49 (0) 6181 35 9637  
E-mail: [preciouscolours@heraeus.com](mailto:preciouscolours@heraeus.com)  
Internet: [www.heraeus-preciouscolours.com](http://www.heraeus-preciouscolours.com)

<b>L-N/R 202</b>		
<p>Formation of regular round to oval surfaces</p> 	<p>A particularly striking effect results when the coating L-N/R 202 is applied as a decoration, e. g. as circles, waves or bands.</p> 	<p>A particularly striking effect results when the coating L-N/R 202 is applied on pre-fired bright gold or bright platinum underlays.</p> 
<b>C-N/R 201</b>		
<p>Larger effects than with coating L-N/R 202.</p> 	<p>A particularly striking effect results when the coating C-N/R 201 is applied as a decoration, e. g. as circles, waves or bands.</p> 	<p>A particularly striking effect results when the coating C-N/R 201 is applied on pre-fired bright gold or bright platinum underlays.</p> 
<b>F-N/R 204</b>		
<p>Similar decoration formation as with C-N/R 201, however drawn out still further.</p> 		

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.

**Technical Information Nr. 2.6/4**

**Heraeus Precious Metals GmbH & Co. KG**

Business Unit Precious Colours  
 Heraeusstraße 12-14  
 D-63450 Hanau  
 Phone: ++49 (0) 6181 35 4420  
 Fax: ++49 (0) 6181 35 9637  
 E-mail: [preciouscolours@heraeus.com](mailto:preciouscolours@heraeus.com)  
 Internet: [www.heraeus-preciouscolours.com](http://www.heraeus-preciouscolours.com)

## 5 Marble Coatings

Type	Craquelure	Porcelain	Earthenware	Glass	Notes
A-N/B 491	Lines	●	●	●	for brush application, water soluble, not for thinning and spraying
C-N/R 201	Honeycomb Effect	●	●	●	for brush application, water soluble, not for thinning and spraying
E-N/B 203	Lines	●	●	●	for brush application, water soluble, not for thinning and spraying
F-N/R 204	Honeycomb Effect	●	●	●	for brush application, water soluble, not for thinning and spraying
K-N/B 207	Lines	●	●	●	for brush application, water soluble, especially suitable for yellow and green lustres, not for thinning and spraying
L-N/R 202	Honeycomb Effect	●	●	●	for brush application, water soluble, not for thinning and spraying

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.

Technical Information Nr. 2.6/4

**Heraeus Precious Metals GmbH & Co. KG**

Business Unit Precious Colours  
 Heraeusstraße 12-14  
 D-63450 Hanau  
 Phone: ++49 (0) 6181 35 4420  
 Fax: ++49 (0) 6181 35 9637  
 E-mail: [preciouscolours@heraeus.com](mailto:preciouscolours@heraeus.com)  
 Internet: [www.heraeus-preciouscolours.com](http://www.heraeus-preciouscolours.com)