

Heraeus



**Heraeus Ceramic Colours –
Products for the tile industry**

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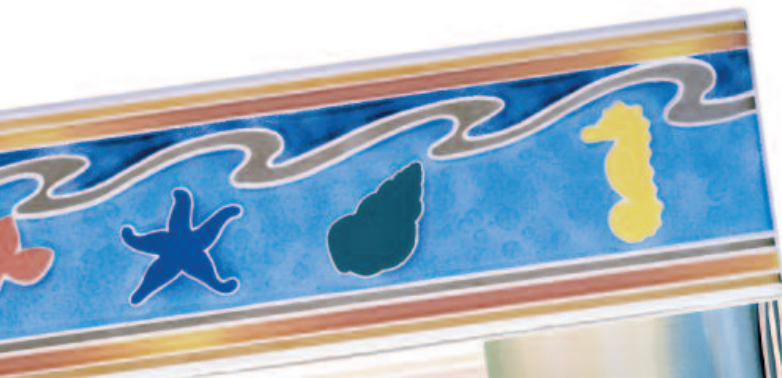
Heraeus Ceramic Colours is one of the leading manufacturers of materials for the decoration of ceramics and glass. Precious metal preparations, lustres, ceramic and organic colours as well as auxiliary materials such as media and covercoat are manufactured at six production sites worldwide. Representatives in more than 80 countries provide excellent service close to the customer around the globe.

Decorating materials for tiles are a significant part of our product range. They have to meet high demands on various types of glaze and different firing temperatures. Classical precious metal preparations and colours as well as innovative products and decorating systems facilitate the creation of high-quality tile decorations.

Meet the colourful world of Heraeus Ceramic Colours! This brochure gives you a general idea of the most important decorating materials for tiles. But there is more to this. Contact our local representatives or visit our website www.heraeus-ccd.com.

There you will find an overview of our worldwide representatives, technical information, our product programme and much more. We will be pleased to be there for you!





Precious Metal Preparations

A wide range of precious metal preparations for various types of application enables challenging decorations of tiles. These preparations are available with different precious metal contents for different firing ranges and glazes as well as for vetrosa.

Lustres

Lustres generate high gloss finished decorations. Their metallic iridescent brightness is a typical characteristic. In combination with marble coatings attractive craquelure-effects can be achieved. They are available as solvent or as water based.



Colours

Colour intensive tile decorations can be reached with ceramic colours for various firing ranges, some of which can be used under vetrosa. Diverse surface designs can be achieved by the application of effect colours.

Auxiliary Materials

Auxiliary materials for the decoration of tiles such as media or covercoats are available for every kind of application. These preparations can be offered as solvent or as water based.

UV-Curing Products

Special UV-curing products such as precious metal preparations, lustres, colours and auxiliary materials facilitate the technically challenging and ecologically friendly decoration of tiles in an economic and innovative way.

Products For Glass Tiles

For the decoration of glass tiles we produce a wide range of precious metal preparations which are described in detail in our brochure "Colours and precious metal preparations for hot glass techniques".

Precious Metal Preparations

Direct Screen Printing

Product	Precious Metal Content	Colour	Remarks
GGP 2334	10%	light yellow	bright gold paste, standard product, normal firing
GGP 2563	8%	light yellow	bright gold paste, standard product, normal firing
GGP 2305	12%	yellow	bright gold paste, also suitable for fast firing, wide firing range
GGP 2450	10%	yellow	bright gold paste, also suitable for fast firing, wide firing range
GGP 2451	9%	yellow	bright gold paste, also suitable for fast firing, wide firing range
GGP 2603	8-10%	yellow	bright gold paste, standard product, normal firing
GGP 2564	7%	yellow	bright gold paste, standard product, normal firing
GGP 2608	7%	yellow	bright gold paste, standard product, normal firing
GGP 2340	8%	yellow red	bright gold paste, standard product, normal firing
GGP 2618	7%	yellow red	bright gold paste, standard product, normal firing
GPP 4601	8%	white	bright platinum paste, also suitable for fast firing, wide firing range
GPP 4302	9%	white platinum	bright platinum paste, also suitable for fast firing, wide firing range
GPP 4327	6%	white platinum	bright platinum paste, standard product, normal firing
GPP 4321	9%	standard platinum	bright platinum paste, standard product, normal firing
GPP 4523	5%	standard platinum	bright platinum paste, standard product, normal firing
GPP 4328	4%	standard platinum	bright platinum paste, standard product, normal firing
GPP 4324	5%	standard platinum	bright platinum paste, standard product, normal firing



Direct Screen Printing (high firing temperatures approx. 900°C - 1000°C / 1650 - 1830°F)

Product	Precious Metal Content	Colour	Remarks
GGP 2381/HT	10%	yellow red	bright gold paste for hard tile glazes, can be fired with colours of series H 6600 and H 6000 as well as next to vetrosa in one fire
GGP 2385/HT	10%	yellow red	bright gold paste for soft tile glazes, can be fired with colours of series H 6600 and H 6000 as well as next to vetrosa in one fire
GPP 4382/HT	9%	standard platinum	bright platinum paste for hard tile glazes, can be fired with colours of series H 6600 and H 6000 as well as next to vetrosa in one fire
GPP 4386/HT	11%	standard platinum	bright platinum paste for soft tile glazes, can be fired with colours of series H 6600 and H 6000 as well as next to vetrosa in one fire

Precious Metal Preparations

Direct Screen Printing (suitable for vetrosa)

Product	Precious Metal Content	Colour	Remarks
GGP 2305	12%	light yellow	bright gold paste, also suitable for fast firing, wide firing range
GGP 2334	10%	light yellow	bright gold paste, standard product, normal firing
GGP 2451	9%	yellow	bright gold paste, also suitable for fast firing, wide firing range
GGP 2617	9%	yellow red	bright gold paste, also suitable for fast firing, wide firing range, high abrasion resistance
GPP 4302	9%	white platinum	bright platinum paste, also suitable for fast firing, wide firing range
GPP 4327	6%	white platinum	bright platinum paste, standard product, normal firing
GPP 4328	4%	standard platinum	bright platinum paste, standard product, normal firing

Note: The firing result is determined by the combination of precious metal preparation, tile glaze and the individual firing conditions. To achieve a best possible firing result, we in principal recommend firing tests under own individual conditions.

Decals

Product	Precious Metal Content	Colour	Remarks
GGP 2601	8-12%	light yellow	bright gold paste, standard product, normal firing
GGP 2608	7%	yellow	bright gold paste, standard product, normal firing
GGP 2602	8-10%	yellow red	bright gold paste, also suitable for fast firing, wide firing range
GGP 2603	9%	yellow red	bright gold paste, also suitable for fast firing, wide firing range
GGP 2617	9%	yellow red	bright gold paste, also suitable for fast firing, wide firing range, high abrasion resistance
GGP 2618	7%	yellow red	bright gold paste, standard product, normal firing
GPP 4601	8%	white	bright platinum paste, also suitable for fast firing, wide firing range



Brush Application and Spraying

Product	Precious Metal Content	Colour	Remarks
GG 1507	10%	light yellow	bright gold, standard product, normal firing
GG 1523	8-10%	yellow	bright gold, standard product, normal firing
GG 95/3	10%	yellow red	bright gold, standard product, normal firing
GG NZ	8-10%	yellow red	bright gold, standard product, normal firing
GP 1404/6	7%	white	bright platinum, standard product, normal firing



Lustres

Direct Screen Printing and Decals (solvent based)

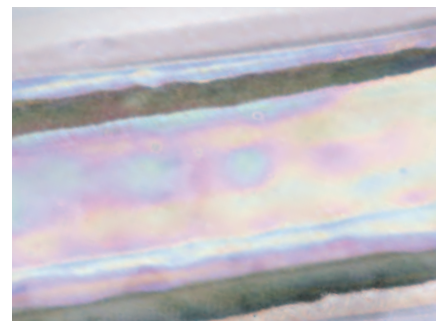
Product	Colour	Product	Colour
N 012/F/SI	pink	N 610/SI	blue
N 338/SI	green	N 620/SI	roe brown
N 472/SI	iris	N 631/SI	white
N 486/SI	dark blue	N 633/SI	yellow iris
N 488/SI	light blue	N 640/SI	light green
N 493a/SI	goldamber	N 643/SI	dark green
N 495/SI	purple	N 651/SI	orange
N 496/SI	carmine	N 681/SI	grey
N 497a/SI	aurora	ST 26/SI	copper
N 498a/SI	smoke topas	LU 9300/SI	white
N 502/SI	green	LU 9301/SI	silver iris
N 504/SI	rembrandt brown	LU 9801/SI	grey
N 508D/SI	black	LU 9805/SI	light grey
N 513/SI	lilac iris	LU 9806/SI	dark grey
N 518/SI	turquoise green	LUP 9201/SD	copper (only suitable for direct screen printing)
N 608/SI	platinum	LUP 9316/SD	roe brown (only suitable for direct screen printing)

Notice: Preparations with the additional remark "SI" are suitable for indirect screen printing (decals).
The indication "SD" stands for direct screen printing.



Direct Screen Printing (water based)

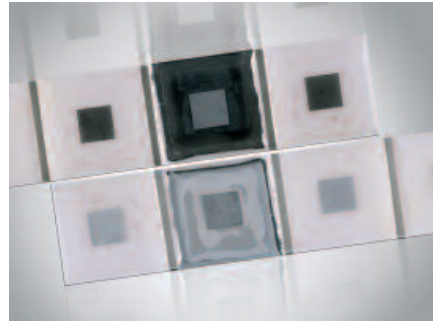
Product	Colour
LUP 9355	white



Lustres

Brush Application and Spraying (solvent based)

Product	Colour	Product	Colour
N 012/F	pink	N 543	grey
N 338	green	N 548	brown
N 401	cobalt blue	N 607	platinum
N 472	iris	N 610	royal blue
N 480	grey	N 620/1	roe brown
N 487	blue	N 631	silver white
N 488	light blue	N 633	yellow iris
N 493	goldamber	N 640	light green
N 495	purple	N 641	medium green
N 496	carmine	N 642	green
N 497a	aurora	N 643	dark green
N 498	smoke topas	N 650/1	orange
N 499	violet	N 681	grey
N 502	green	ST 26	copper
N 504	rembrandt brown	LU 9300	white
N 508D	black	LU 9351	white
N 513	lilac iris	LU 9800	black
N 515	sepia		



Brush Application and Spraying (water based)

Product	Colour
LU 9354	white



Marble Coating

Product	Craquelure	Remarks
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
G-N 205	lines	for direct silk-screening, water soluble, not for thinning and spraying
K-N/B 207	lines	for brush application, water soluble, especially 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

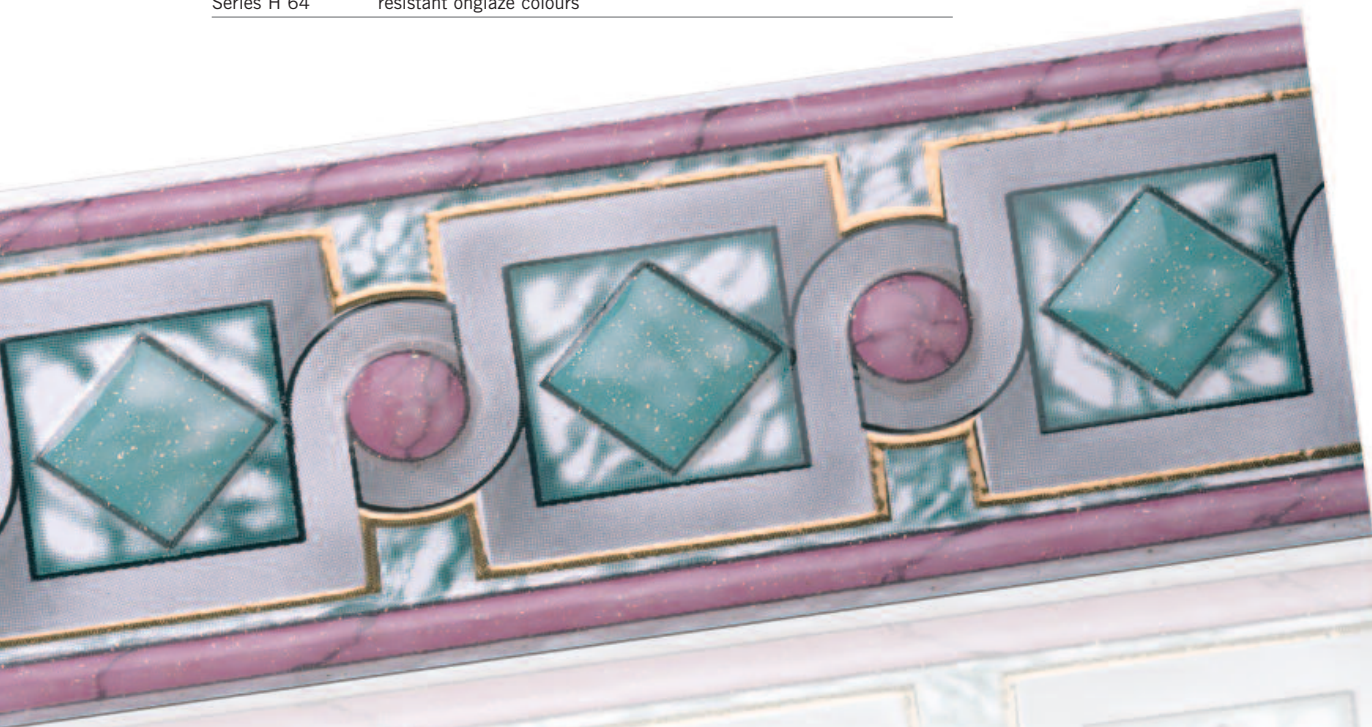
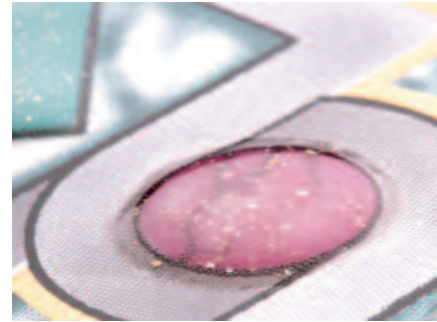
Notice: Marble coatings consist of bonding agents in a water / alcohol solution.

They cause marble effects after the application on well-dried lustres or bright precious metal preparations and after firing. Refer to Technical Information Nr. 2.6.

Colours

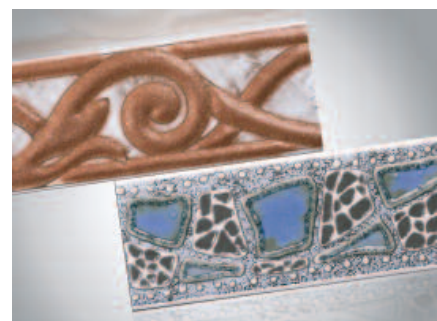
Colours

Product	Remarks
Series H 6000	high temperature fast firing colours for tiles
Series H 6600	high temperature fast firing colours for tiles
Series H 67	high temperature fast firing colours
Series H 84	high temperature fast firing colours, lead free
Series K	rustic effect colours for earthenware and tiles
Series VK	rustic effect colours for earthenware and tiles
Series H 55	lead and cadmium free metallic and interference metallic colours
Series H 56	lead and cadmium free onglaze colours
Series H 57	lead and cadmium free onglaze colours
Series H 63	resistant onglaze colours for low firing temperatures
Series H 64	resistant onglaze colours



Auxiliary Materials

Product	Remarks
Nr. 208	screen printing medium for decals, quick-drying (solvent based)
Nr. 221	screen printing medium for decals (solvent based)
L 406	transfer covercoat for decals, film stable (solvent based)
Nr. 218	screen printing medium (water based), only for direct screen printing
Nr. 218/6	screen printing medium (water based), quick-drying, only for direct screen printing



UV-Curing Products – Direct Screen Printing

Precious Metal Preparations

Product	Precious Metal Content	Colour	Remarks
GGP 2519/UV	10%	yellow	bright gold paste, excellent compatibility with bordering UV-curable lustres and colours

Lustres

Product	Colour	Product	Colour
N 472/S/UV	iris	N 498/S/UV	topas brown
ST 26/S/UV	copper	N 502/S/UV	green
N 012/F/S/UV	pink	N 513/S/UV	lilac iris
N 488/S/UV	light blue	N 651/S/UV	orange

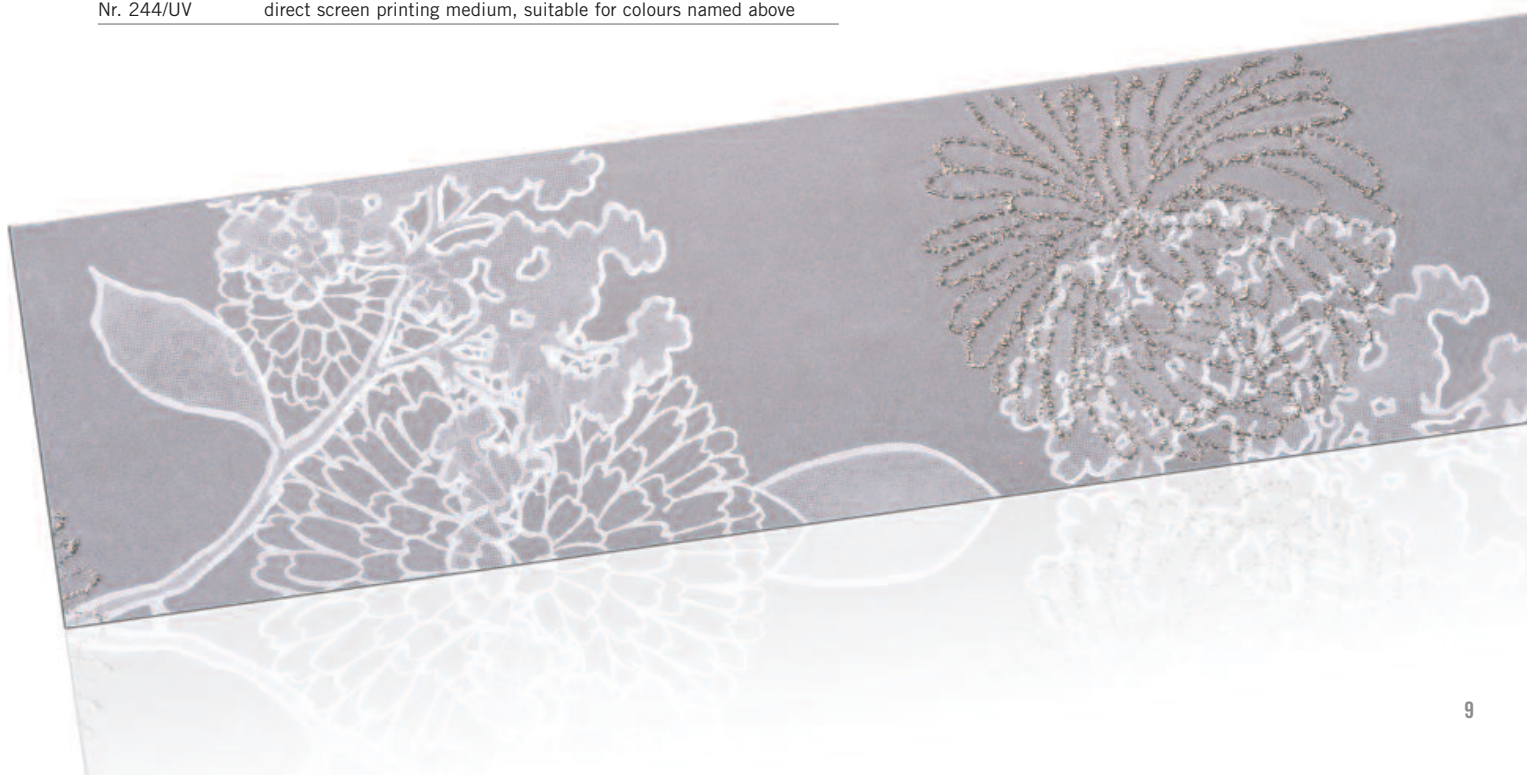
Further colours are available on request.

Colours

Product	Remarks
Series H 6000	high temperature fast firing colours for tiles
Series H 6600	high temperature fast firing colours for tiles
Series H 55	lead and cadmium free metallic and interference metallic colours
Series H 56	lead and cadmium free onglaze colours
Series H 63	resistant onglaze colours for low firing temperatures
Series H 64	resistant onglaze colours
Series H 67	inglaze fast firing colours
Series H 84	high temperature fast firing colours, lead free

Auxiliary Materials

Product	Remarks
Nr. 244/UV	direct screen printing medium, suitable for colours named above



Products for Glass Tiles

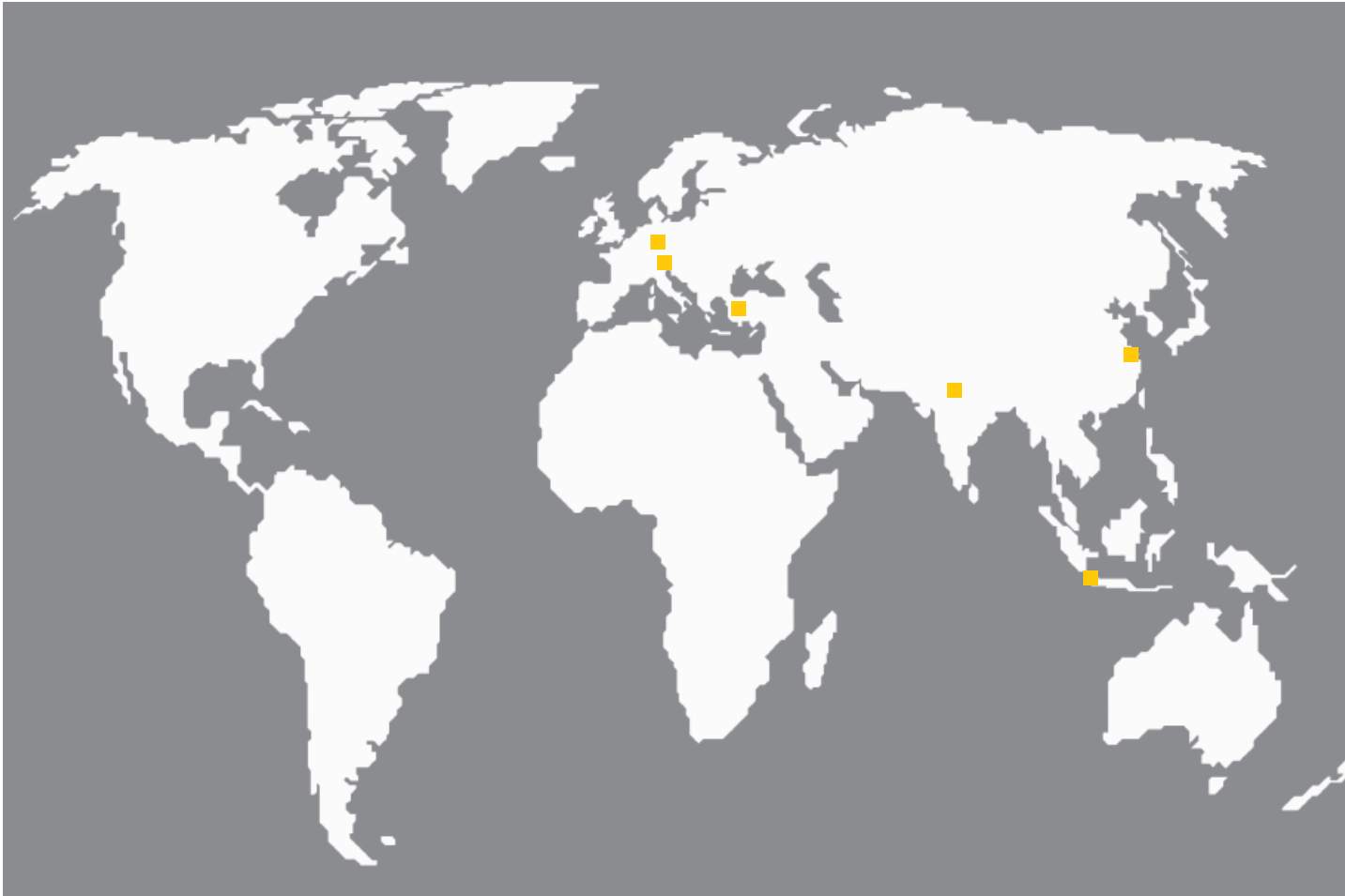
You will find a multitude of products for the decoration of glass tiles in our brochure

Colours and Precious Metal Preparations for Hot Glass Techniques,

which is available on request. It is also published on our website www.heraeus-ccd.com.



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