Heraeus Precious Metals



### **Heraeus Precious Coatings**

Precious metal products for the decoration of ceramics and glass — Metallo organic materials for technical usage

# **Heraeus Precious Coatings** — world leading manufacturer of metallo organic precious metals







Originally founded as the Ceramic Colours Division in Hanau (Germany) in 1900, Heraeus Precious Coatings produces a wide range of precious metal materials for decorating ceramics and glass as well as for technical applications used in many areas such as the automotive, aeronautic or electronic industries.

The metallo organic materials of Heraeus Precious Coatings are produced at two state-of-the-art production sites. The main production site is located at Heraeus Tokmak in Izmir (Turkey). The other site is located at HPMT, Nanjing (China) and produces exclusively for the Chinese market.

Heraeus Tokmak built a new headquarter on an area of over 9000m² in 2005. The site is located 25 km east of Izmir in a larger industrial area. It is the workplace of more than 40 employees who specialize in the development and production of metallo organic materials. Over 570 solar panels were recently installed at the building complex, making it Heraeus Precious Metal's first energy-independent and carbon-neutral plant.

The current portfolio includes over 200 different products.

One hundred and fifty of these products were successfully transferred from Heraeus in Hanau to Heraeus Tokmak

in 2019/2020. This transfer consolidated part of the existing product line and now the portfolio is growing again. While the range of precious metal preparations for decorating ceramics, glass and tiles remains stable, the demand for highly specialized metallo organic materials used in technical applications is currently increasing thus driving product variety. We supply a multitude of materials to customers all around the globe.





# Heraeus Precious Coatings –

### the world of precious metals

Our product portfolio of precious metals comprises the following product groups:

#### Bright gold, bright palladium and bright platinum

Brilliant, bright and shiny precious metal preparations suitable for high-temperature firing in a range of different colours designed for application methods such as brushing, spraying, direct screen printing, decal production and machine lining.

#### Matt gold, matt palladium and matt platinum

Precious metals with a silk matt metal appearance without needing any further treatment after firing. The precious metal content of matt golds is typically between bright golds and the higher-percentage burnish golds. We offer these materials in a variety of metallic colour shades as well as for application methods such as brushing, direct screen printing and decal production.

#### Burnish gold, burnish palladium and burnish platinum

Metal powder-based materials displaying a deep, rich, silk matt appearance after firing and burnishing. We offer burnish preparations in various colours for applications by brush, in screen printing and for producing decals.

#### High-temperature gold, high-temperature white gold

These special burnish golds can be fired at temperatures between 1180–1230°C. After firing and burnishing, they have a deep, rich, silk matt appearance. High-temperature gold decorations are especially resistant to dishwashing and thus used for high quality decorations. We offer materials for brushing, screen printing and producing decals.

#### Lusters

Lusters typically feature an iridescent, bright metal appearance after firing. With the materials we offer, unique effects can be created in brushing, spraying, screen printing applications as well as decal production. We offer lusters in a variety of metallic colour shades.

#### Decoration systems

Heraeus Precious Coatings has developed a range of different decoration systems, which cleverly combine different kinds of materials – underlays, reliefs, fluxes and of course precious metal preparations to achieve magnificently complex decoration effects. Check out the product information on our decoration systems available for download at our website **www.heraeus-preciouscoatings.com!** 

- Heraeus Matt Gold System
- Heraeus One-Fire Etching Imitation System
- Heraeus Two-Fire Etching Imitation System
- Heraeus Glaze-Protected Bright Gold

Heraeus Precious Coatings — magnificent decoration effects

Heraeus Precious

diversity for the

decoration of

Coatings – product

ceramics and glass

#### Metallo organic materials for technical usages

Heraeus Precious Coatings offers a range of very special metallo organic materials for technical applications. These materials, for example, are used in sensor production for the automotive industry, for heat shielding in the aeronautic industry, as a conductive layer in electronics, as a reflective layer in the lighting industry or as a super-conductive layer in electrical wires. Metallo organic preparations form very thin, highly conductive layers after firing. Precise fine line prints are possible. The metal layers, only a fraction of a micron thin, can be etched into structures that are not even printable.

Heraeus Precious Coatings — metallo organics for technical usage



### Bright gold

Bright gold, bright palladium, bright platinum – for brush application								
Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description		
liquid bright gold	FA 324T-8%	light yellow	porcelain	tiles	brush	Concentrate. Needs to be thinned by 30-40%. Silver containing. Oxidation risk unfavourable storage conditions.		
liquid bright gold	FA 327T-8%	light yellow	porcelain	tiles	brush	Concentrate. Needs to be thinned by 30-40%. Silver containing. Oxidation risk unfavourable storage conditions.		
liquid bright gold	GG 3021D H	light yellow	porcelain		brush	Good brushing characteristics. Good adhesion. Dishwasher durable decorations possible.		
liquid bright gold	GG 346-10% H	light yellow	porcelain		brush	Good detergent durability. Suitable for the Etching Imitation System.		
liquid bright gold	GG 347-12% H	light yellow	porcelain		brush	Good detergent durability. Suitable for the Etching Imitation System.		
liquid bright gold	GG 1539-10% H	yellow red	porcelain		brush	Good ASTM and detergent resistance. Oxidation insensitive. Suitable for the Etching Imitation System.		
liquid bright gold	GG 501/11 H	yellow red	porcelain	bone china	brush	Good ASTM and detergent resistance. Oxidation insensitive. Suitable for the Etching Imitation System.		
liquid bright platinum	GP 1404 H	platinum	porcelain		brush	Good detergent resistance. Oxidation insensitive. Suitable for the Etching Imitation System.		
liquid bright platinum	GP 3309/1 H	platinum	porcelain	bone china	brush	Dishwasher resistant. Good ASTM and Calgonite resistance. Oxidation insensitive. Do NOT shake before usage!		
liquid bright palladium	GP 350 H	platinum	porcelain	tiles	brush	Low viscous liquid bright palladium. Low metal content. Excellent price/value ratio.		

### Bright gold

#### Bright gold, bright platinum, bright palladium paste – for direct screen printing / decal production

Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
bright gold paste	CA 328T-8%	light yellow	porcelain	tiles	decal printing	Low viscous decal paste. Silver containing. Oxidation risk. Good dishwashing and ASTM resistance.
bright gold paste	GGP 2538- 10% H	light yellow	porcelain		decal printing	Good detergent durability. Suitable for the Heraeus Matt Gold System and the One Fire Etching Imitation System.
bright gold paste	GGP 1215- 12% H	yellow	porcelain		decal printing	Good detergent durability. Suitable for the Heraeus Matt Gold System.
bright gold paste	GGP 2536- 10% H	yellow	porcelain	bone china	decal printing	Good ASTM and Calgonite resistance. Suitable for the Heraeus Matt Gold System and One Fire Etching Imitation System.
bright gold paste	GGP 3022 D- 12% H	yellow	porcelain		decal printing	Good ASTM and Calgonite resistance. Oxidation insensitive. Suitable for Matt Gold / One Fire Etching Imitation System.
bright gold paste	GGP 1220- 10% H	yellow red	porcelain	bone china	decal printing	Good detergent durability. Oxidation insensitive. Suitable for the Heraeus Matt Gold System.
bright gold paste	GGP 2516/MW- 9% H	yellow red	porcelain	bone china	decal printing	Oxidation insensitive. Extremely good scratch resistance. Microwave safe.
bright gold paste	GGP 2531/MW- 7% H	yellow red	porcelain	bone china	decal printing	Oxidation insensitive. Extremely good scratch resistance. Microwave safe.
bright copper paste	CL 344T	copper	porcelain	tiles	decal printing	Low viscous decal copper paste. Oxidation insensitive.
bright palladium paste	CL 310T	platinum white	porcelain	tiles	decal printing	Low viscous bright palladium paste for decals.
bright platinum paste	CL 333T	platinum white	porcelain	tiles	decal printing	Higher viscous bright platinum decal paste.
bright palladium paste	CP 316T	platinum white	porcelain	tiles	decal printing	Low viscous decal paste.
bright platinum paste	GPP 1240 H	platinum	porcelain	bone china	decal printing	Diswasher durability at higher fast firing. Suitable for the Heraeus Matt Gold System and Etching Imitation System.
bright platinum paste	GPP 5018 D/MW H	platinum	porcelain	bone china	decal printing	Very wide firing range. Microwave safe. Extremely scratch resistance.

#### Bright gold paste – for stippling

Product Group	Product	Colour	Substrate 1	Substrate 2	Application	Description
bright gold paste	GGP 5001 D- 10% H	yellow	bone china	porcelain	stippling	Good detergent durability on bone china. Oxidation insensitive.

#### Matt gold

liquid silk matt

platinum

Matt gold, matt platinum – for brush application									
Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description			
liquid silk matt gold	MG 1516- 11% H	light yellow	porcelain		brush	Lower cost material. Reasonable dishwasher durability.			
liquid silk matt	MG 1316- 16% H	yellow red	bone china	porcelain	brush	Liquid matt gold for bone china. Good detergent resistance. Good ASTM and Calgonite resistance. Oxidation insensitive.			

porcelain

brush

Reasonable detergent durability.

# Matt gold paste, matt platinum paste – for direct screen printing / decal production

bone china

platinum

yellow

MP 3311 H

Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
silk matt gold paste	MGP 2318- 14% H	yellow	bone china	porcelain	decal printing	Good detergent resistance on bone china. Material typically used of institutional tableware.
silk matt gold paste	MGP 2328- 12% H	yellow	bone china	porcelain	decal printing	Good detergent resistance on bone china. Good Calgonite resistance. Oxidation insensitive.
silk matt gold paste	MGP 2528- 15% H	yellow	porcelain	bone china	decal printing	Good detergent resistance. Material typically used of institutional tableware.
silk matt platinum paste	MPP 4318 H	platinum yellow	bone china	porcelain	decal printing	Comparably bright silk matt platinum after firing.

### Burnish gold

#### Burnish gold, burnish platinum – for brush application

Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
liquid burnish gold	PG 1612- 16,4% HD	yellow	porcelain		brush	Medium viscous material. Reasonable dishwasher durability and scratch resistance considering the lower metal content.
liquid burnish gold	PG 657 W H	yellow	porcelain		brush	Medium viscous material. Good brush characteristics. Good dishwasher durability and scratch resistance.
liquid burnish gold	PG 698 H	yellow	porcelain		brush	Lower viscous material. Good brush characteristics. Good dishwasher durability and scratch resistance.
liquid burnish platinum	PP F BS/4 H	platinum yellow	porcelain		brush	Medium viscous. Standard liquid burnish platinum often used for dinnerware decoration.

#### Burnish gold

Burnish gold paste,	burnish platinum	paste – for direc	t screen printing	/ decal production

Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
burnish gold paste	PGP 0096A H	yellow	porcelain		decal printing	Extremely homogeneous gold layer after firing. High dishwashing resistance and scratch resistance.
burnish gold paste	PGP 3036 D- 32% H	yellow	porcelain		decal printing	Highest gold containing burnish gold paste within our range. Good detergent and scratch resistance.
burnish gold paste	PGP BG 180/209 H	yellow	porcelain	bone china	decal printing	Higher gold containing burnish gold paste. Good detergent and scratch resistance.
burnish palladium paste	PPP NR. 341/209 H	platinum white	porcelain		decal printing	Standard burnish palladium paste often used on institutional dinnerware. Dishwasher durable. Good scratch resistance.

#### Burnish gold paste – for machine lining

Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
burnish gold paste	PGP 6500-20% H	yellow	porcelain		machine lining	Special burnish gold paste for machine lining neoprene. Good detergent and scratch resistance.

### High temperature gold

#### High temperature golds – for brush application

Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
liquid high temperature gold	SG 822 H	yellow red	porcelain		brush	Medium viscous material typically used on institutional dinnerware. Dishwasher resistant. Good scratch resistance.
liquid high temperature white gold	SG WHITE 5946 H	platinum	porcelain		brush	Medium viscous material typically used on institutional dinnerware. Dishwasher resistant. Good scratch resistance.

#### High temperature gold pastes – for direct screen printing and decal production

Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
high temperature gold paste	SGP 21/ 204/209 H	yellow red	porcelain		decal printing	Standard high temperature gold paste. Firing range 1180-1230°C. Dishwasher resistant. Good scratch resistance.
high temperature gold paste	SGP 41/ UV H	yellow red	porcelain		decal printing	Paste can be dried under UV-light. Firing range 1180-1230°C. Dishwasher resistant. Good scratch resistance
high temperature gold paste	SGP 5818 S H	yellow red	porcelain		decal printing	Standard high temperature gold paste. Firing range 1180-1230°C. Dishwasher resistant. Good scratch resistance.
high temperature white gold paste	SPP 34/209 H	platinum	porcelain		decal printing	Standard high temperature white gold paste. Firing range 1180-1230°. Dishwasher resistant. Good scratch resistance.
high temperature white gold paste	SPP 42/UV H	platinum	porcelain		decal prin- ting	Paste can be dried under UV-light. Firing range 1180-1230°C. Dishwasher resistant. Good scratch resistance

### Lusters

Lusters – for b	rush application	ı				
Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
luster liquid	LU N 543 GREY H	grey	porcelain	tiles	brush	The colour impression is influenced by the substrate glaze and strongly by the material deposit. Thinned sprayable.
luster liquid	LU N 630 IRIS H	iris	porcelain	tiles	brush	The colour impression is influenced by the substrate glaze and strongly by the material deposit. Thinned sprayable.
luster liquid	LU ST 26 COPPER H	copper	porcelain	tiles	brush	Copper luster for brush application and spraying. Reasonable scratch resistance.
luster liquid	LU 0038A PINK H	pink	porcelain	tiles	brush	Pink lusters are storage sensitive. They should be stored in a fridge, not frozen and used up within three months time.
luster liquid	LU 2A RUBY RED H	Ruby red	porcelain	tiles	brush	Red lusters are storage sensitive. They should be stored in a fridge, not frozen and used up within three months time.
luster liquid	LU 34 SILVER IRIS H	Silver iris	porcelain	tiles	brush	The colour impression is influenced by the substrate glaze and strongly by the material deposit.
luster liquid	LU 9301 SILVER IRIS H	Silver iris	porcelain	tiles	brush	The colour impression is influenced by the substrate glaze and strongly by the material deposit.
luster liquid	LU FL 365 ORANGE H	orange	porcelain	tiles	brush	The colour impression is influenced by the substrate glaze and strongly by the material deposit.
luster liquid	LU N 338 GREEN H	green	porcelain	tiles	brush	The colour impression is influenced by the substrate glaze and strongly by the material deposit.
luster liquid	LU N 472 IRIS H	iris	porcelain	tiles	brush	The colour impression is influenced by the substrate glaze and strongly by the material deposit.

Luster pastes – for direct screen printing and decal production									
Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description			
luster paste	LUP 9301/SI SILVER IRIS H	Silver iris	porcelain	tiles	decal printing	The colour impression is influenced by the substrate glaze and strongly by the material deposit.			
luster paste	LUP N 631/SI WHITE H	white	porcelain	tiles	decal printing	The colour impression is influenced by the substrate glaze and strongly by the material deposit.			



# **Products for decorating glass**

### Bright gold

Bright gold, bright palladium, bright platinum – for brush application								
Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description		
liquid bright gold	FA 136T-10%	light yellow	soda lime glass	borosilicate glass	brush	Concentrate. Material needs to be thinned by 30-40%. Silver containting. Oxidation risk.		
liquid bright gold	FA 136T-8%	light yellow	soda lime glass	borosilicate glass	brush	Concentrate. Material needs to be thinned by 30-40%. Silver containting. Oxidation risk.		
liquid bright gold	GG 1046-12% H	light yellow	soda lime glass	borosilicate glass	brush	Medium viscous. Moderate silver content. Less oxidation risk. Suitable for the two-fire-etching imitation system.		
liquid bright gold	GG 1237 D H	light yellow	soda lime glass	borosilicate glass	brush	Higher viscous. Lower cost material. Good ASTM resistance. Dishwasher durable decorations possible.		
liquid bright gold	GG 1228 D-10% H	yellow red	soda lime glass	borosilicate glass	brush	Medium viscous liquid bright gold. Reasonable dishwasher durability in test. No oxidation risk.		
liquid copper	FA 115T	copper	soda lime glass	borosilicate glass	brush	Concentrate. Material needs to be thinned by 30-40%. Oxidation insensitive.		
liquid bright palladium	GP 110 H	platinum white	soda lime glass	lead crystal	brush	Higher viscous. Low silver content. Less oxidation sensitive. Also suitable for lead crystal.		

Bright gold, bright platinum, bright palladium paste – for direct screen printing (wet paste)								
Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description		
bright gold paste	GGP 1205 D-10% H	light yellow	soda lime glass	glass bottles	direct screen printing wet paste	The paste is typically used on coated bottles. Good adhesion.		
bright gold paste	GGP 1235 D H	light yellow	soda lime glass	glass bottles	direct screen printing wet paste	Higher viscous. Higher thixotropic for fine line decoration. Good adhesion on coated bottles. Silver containing.		
bright gold paste	GGP 2051-12% H	yellow	soda lime glass	glass bottles	direct screen printing wet paste	Medium viscous. Good adhesion on coated bottles. Good ASTM resistance. Moderate silver content.		
bright copper paste	GGP 2067-7,4% H	copper	soda lime glass	glass bottles	direct screen printing wet paste	Higher viscous copper paste. Mostly used on coated bottles. Good adhesion. Oxidation insensitive.		
bright palladium paste	GPP 020218 H	platinum white	soda lime glass	glass bottles	direct screen printing wet paste	Higher viscous. Thixotropic. Most whitish platinum colour shade. Good chemical resistance.		
bright palladium paste	GPP 1000 D H	platinum golden	soda lime glass		direct screen printing wet paste	Medium viscous. Least haze sensitive platinum paste. Good chemical resistance. Also suitable for lead crystal.		

# Products for decorating glass

#### Bright gold

#### Bright gold, bright platinum, bright palladium paste – for direct screen printing (thermoplastic)

Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
bright gold paste	GGP 1114 D/ TH H	light yellow	soda lime glass		direct screen printing thermoplastic	Higher viscous. Thixotropic. High contour sharpness. Good scratch resistance.
bright gold paste	GGP 1233 D/ TH H	light yellow	soda lime glass	glass bottles	direct screen printing thermoplastic	Higher viscous. Thixotropic. High contour sharpness. Good adhesion on coated bottles. Good scratch resistance.
bright gold paste	GGP 1236 D/ TH ROSE H	rose	soda lime glass	glass bottles	direct screen printing thermoplastic	Higher viscous. Thixotropic. High contour sharpness. Good adhesion on coated bottles. Good scratch resistance.
bright copper paste	GGP 1238 D/ TH COPPER H	copper	soda lime glass	glass bottles	direct screen printing thermoplastic	Higher viscous thermoplastic copper paste. High contour sharpness. Good scratch resistance. Oxidation insensitive.
bright palladium paste	GPP 1119 D/ TH H	platinum white	soda lime glass	glass bottles	direct screen printing thermoplastic	Medium viscous thermoplastic bright palla- dium paste. High contour sharpness. Mostly used for beer glass decoration.

#### Bright gold, bright platinum, bright palladium paste – for decal production

Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
bright gold paste	GGP 1230-8% H	yellow	soda lime glass	borosilicate glass	decal printing	Lower viscous. Suitable for various types of glass. Low cost material. Moderate silver content.
bright gold paste	GGP 2046-10% H	light yellow	soda lime glass	borosilicate glass	decal printing	Lower viscous. Wide firing range up to 750°C. Also suitable for borosilicate glass and lead crystal.
bright gold paste	GGP 2127-9% H	yellow	soda lime glass	borosilicate glass	decal printing	Medium viscous. Good chemical resistance. Also suitable for heat release decals. Moderate silver content.
bright platinum paste	GPP 1261 H	platinum	soda lime glass		decal printing	Medium viscous. Also suitable for head release decals. Moderate silver content.

#### Bright gold, bright platinum, bright palladium paste – for machine lining

Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
bright gold paste	GGP 1110 D- 9% H	light yellow	soda lime glass		machine lining	Standard bright gold paste for neoprene lining. Mostly used for lining of beer glasses. Good chemical resistance.
bright palladium paste	GPP RC/4021 H	platinum	soda lime glass		machine lining	Standard bright palladium paste for neoprene lining. Mostly used for lining of beer glasses. Good chemical resistance.

# Products for decorating glass

### Burnish gold

Burnish gold, burnish platinum – for brush application									
Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description			
liquid burnish gold	PG 5003-18% H	yellow	soda lime glass		brush	Medium viscous liquid burnish gold for brush application on glass.			

#### Lusters

Lusters – for brush application								
Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description		
luster liquid	LU 109A RUBY RED H	Ruby red	glass		brush	Red lusters are storage sensitive. They should be stored in a fridge, not frozen and used up within three months time.		
luster liquid	LU 200 DARK BLUE H	dark blue	glass	quartz glass	brush	Blue lusters are storage sensitive. They should be stored in a fridge, not frozen and used up within three months time.		
luster liquid	TL 4760 IRIS H	iris	hot glass		spray	Thermoluster to be sprayed onto the still hot glass.		

### Special underlays

Special underlays, reliefs, fluxes, media for Heraeus decoration systems										
Thinners and scre	Thinners and screen cleaner									
Product Group	Product	Colour	Main Substrate	Application	Description					
thinner	THINNER V 167 H	not applicable	not applicable	mixing	Medium drying thinner for burnish gold/plati- num/palladium pastes and high temperature gold/white gold pastes.					
thinner	THINNER V 170 H	not applicable	not applicable	mixing	Medium drying standard thinner for bright and silk metal pastes and metallo organic pastes for technical usage.					
thinner	THINNER V 18 H	not applicable	not applicable	mixing	Medium drying thinner for liquid precious metal preparations and lusters. Especially for thinning for spray application.					
thinner	THINNER V 39 H	not applicable	not applicable	mixing	Medium drying thinner for liquid precious metal preparations and lusters. Especially for spraying application.					
thinner	THINNER V 5 H	not applicable	not applicable	mixing	Thinning oil for brush materials faster drying compared with V 6.					
thinner	THINNER V 6 H	not applicable	not applicable	mixing	Standard thinning oil for brush materials.					
Screen cleaner	Screen cleaner V 34	not applicable	not applicable	Screen cleaner	-					



# Metallo organics for technical usages

### Liquid materials

Liquid material	s - for brushing c	lipping an	d spraying			
Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
liquid bright gold resinate	GG 991BD-H T		625 Inconel	stainless steel	spray	Metal solution for the usage on metal alloys typically used on top of a barrier solution e.g. RL A4841-H/2 BLUE T.
liquid bright gold resinate	GG Q 3/ST/2- 15,1% H		quartz glass		spray, brush	Low viscous gold solution for quartz glass. Typically used for reflectors of lamps.
liquid gold/plati- num resinate	RL PT APP100A H BROWN T		625 Inconel	stainless steel	spray	Liquid metallo organic material used for spraying application on top of the barrier solution RL A4841-H/2 BLUE T.
Metallo organic	pastes – for dire	ct screen	printing			
Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
gold resinate paste	RP AU 041008- 22% H		aluminum oxide (glazed or unglazed)		direct screen printing wet paste	Metallo organic paste typically used for pressure sensors. Thixotropic. Higher viscous. Lead free. Sheet resistance: 80 – 130 mOhm/sq
gold resinate paste	RP AU 110410- 15% H		aluminum oxide (glazed or unglazed)		direct screen printing wet paste	Metallo organic paste typically used for pressure sensors. Thixotropic. Higher viscous. Lead free. Sheet resistance: 120 – 240 mOhm/sq
gold/platinum resinate paste	RP AU/PT B3745/2 H		aluminum oxide (glazed or unglazed)		direct screen printing wet paste	Metallo organic paste used for pressure sensors. Thixotropic. Higher viscous. Lead containing. Sheet resistance: $450-1050\ \text{mOhm/sq}$
gold/platinum resinate paste	RP AU/PT B3745/ LF		aluminum oxide (glazed or unglazed)		direct screen printing wet paste	Metallo organic paste used for pressure sensors. Thixotropic. Higher viscous. Lead free. Sheet resistanc: 450 – 1050 mOhm/sq
platinum resinate paste	RP PT 10003- 12,5% H		aluminum oxide (glazed or unglazed)		direct screen printing wet paste	Pure metallo organic PT-paste. Sheet resistance: 1000 – 4000 m0hm/sq
Metal resinates	- typically used	as interm	ediates			
Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
liquid gold resinate	RL AU A1118-24%	Н			mixing	Liquid gold resinate used for the production of metallo organic pastes.
liquid platinum resinate	RL PT M603B H				mixing	Liquid platinum solution used in the production of metallo organic materials.
liquid platinum resinate	RL PT MR 7811-L H	ID			mixing	Liquid platinum solution used in the production of metallo organic materials.
palladium resinate paste	RP PD A2985 H				mixing	Palladium resinate paste used as intermediate in the production of metallo organic materials.
Barrier solution	s – primers as ur	nderlay on	metal subs	trates		
Product Group	Product	Colour	Main Substrate	Other Substrate	Application	Description
barrier solution	RL A4841-H/2 BLUI	ΕT	625 Inconel	stainless steel	spray	Sprayable primer used in combination with GG 991BD-H T and RL PT APP100A BLUE T supports the PM adhesion.
barrier solution	RL A6294/XB2 BLU	ΕT	625 Inconel	stainless steel	spray	Sprayable primer used in combination with GG 991BD-H T and RL PT APP100A BLUE T supports the PM adhesion.



#### Heraeus Precious Metals

Heraeus Deutschland GmbH & Co. KG Heraeusstr. 12–14 63450 Hanau, Germany

#### Heraeus Tokmak A.S.

Kemalpasa O.S.B Mah 37, Sok. No: 6 35170 Ulucak, Kemalpasa, Izmir, Turkey Phone: +90 232 877 2410-110 / -113 / -111 Fax: +90 232 877 2414

Fax: +90 232 877 2414
precious.metals@heraeus.com
www.heraeus-preciouscoatings.com

Complete Product Portfolio

