

## Product Overview

### Resinates

#### Condensed Product List <sup>1, 2, 5</sup>

Product	Pb	RC	Pht	DG	Metal	MC	Form	Peak	AM	Cov	FFT	Rs	Sub	Typ. Appl. <sup>3</sup>
RP Ag 080310	Free	Yes	Free	No	Ag	22.5%	Paste	850	Printing	c. 400	0.1-0.5	50-100	(Glazed) Alumina	Fuse, Conductor, ECS
RP Au 080910 - 22%	Free	Yes	Free	No	Au	22.0%	Paste	850	Printing/ Excellent screen life	c. 400	0.1-0.2	80-130	(Glazed) Alumina	TPH, Pressure sensor, ECS, Fuse
RP Au 110410 - 15%	Free	Yes	Free	No	Au	15.0%	Paste	850	Printing	c. 400	0.1-0.3	140-240	(Glazed) Alumina	TPH, Pressure sensor, ECS
RP 050209 - 12.5%	Free	Yes	Free	No	Au	12.5%	Paste	850	Printing	c. 400	0.1-0.5	250-450	(Glazed) Alumina	TPH, Pressure sensor, ECS
GG Q3-15%	Free	Yes	Free	Yes	Au	15.0%	Solution	850	Spraying/ Brushing	c. 400	0.1-0.3	NA	(Glazed) Alumina	CLSE, IR/Heat reflectors
GG 991BD - H	Free	Yes	Free	Yes	Au	5.5%	Solution	450-500	Spraying/ Brushing	NA	NA	NA	Different metal alloy	IR/Heat reflectors
GP P 12 / 1	Free	Yes	Free	Yes	AuPt	12.3%	Solution	820	Spraying/ Brushing	c. 500	0.1-0.3	NA	Glazed alumina, Quartz glass	CLSE, IR/Heat reflectors
B 3745 / 2 <sup>4</sup>	Yes	Yes	Free	No	AuPt	15.6%	Paste	850	Printing	c. 500	0.1-0.3	≤ 1500	(Glazed) Alumina	Pressure sensor
APP 100A - H -Brown	Free	Yes	Free	Yes	AuPt	6.25%	Solution	400-760	Spraying/ Brushing	NA	NA	NA	Different metal alloy	IR/Heat reflectors
RP 070107 - 15%	Free	Yes	Free	No	Pt	15.0%	Paste	850	Printing	c. 500	0.1-0.3	800-1200	(Glazed) Alumina	Temp. sensor, Conductive structures
A 4841 - H Blue	Free	Yes	Free	Yes	-	-	Solution	400-760	Spraying/ Brushing	NA	NA	NA	Different metal alloys	IR/Heat reflectors

#### Abbreviations:

**Alumina:** Al<sub>2</sub>O<sub>3</sub> 96%, 99%  
**AM:** Application methods  
**CLSE:** Coatings for light source quartz and glass envelopes  
**Cov:** Coverage in cm<sup>2</sup>/g at reference FFT of 0.3 – 0.4 μm  
**DFT:** Dried film thickness in μm  
**DG:** Dangerous good (relevant for transportation only)  
**ECS:** Etched conductor structures – the application notes are for reference only and it should be confirmed by user  
**FFT:** Fired film thickness in μm  
**Rs:** Sheet resistance in mΩ/□ at DFT of 10μm  
**MC:** Metal content in wt. %  
**NA:** Not applicable  
**Peak:** Peak temp. in °C  
**Pht:** Phthalate; RC products can contain phthalate (which is not listed in REACH)  
**RC:** REACH compliant  
**Sub:** Substrate in various types, e.g. alumina, metal, glass  
**TPH:** Thermal print head

#### Footnotes:

1 REACH compliant according to the Commission Regulation (EU) No 143/2011 of 17 February 2011 amending Annex XIV to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH") by European Chemicals Agency and its subsequent amendments; all above mentioned materials do not contain any substance recorded in the Annex XIV.

2 RoHS compliant according to the Directives (European Union) No 2011/65/EC of Restriction of Hazardous Substances ("RoHS") and its subsequent amendments (including the exceptions No. 7. c. 1 of the EU Directive e.g. related to Pb). All materials are free of Cd and Ni, if not stated separately.

3 Typical application field

4 Not RoHS compliant – please ask for a RoHS compliant version, if needed.

5 All materials mentioned here have shelf life of 6 months from date of shipment.

For more details and alternatives – please contact us or see [www.heraeus-thickfilm.com](http://www.heraeus-thickfilm.com) !

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The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for a particular application.

#### Europe [TH]

Heraeus Precious Metals GmbH & Co. KG  
Thick Film Materials Division  
Heraeusstr. 12 – 14  
63450 Hanau  
Germany  
Tel: +49 (6181) 35 - 5466  
E-Mail: [th-info@heraeus.com](mailto:th-info@heraeus.com)  
Internet: [www.heraeus-thickfilm.com](http://www.heraeus-thickfilm.com)

#### Americas [TH]

Heraeus Materials Technology LLC  
Thick Film Materials Division  
24 Union Hill Road  
W. Conshohocken, PA 19428  
USA  
Tel: +1 (610) 825 - 6050  
E-Mail: [techservice.hcd@heraeus.com](mailto:techservice.hcd@heraeus.com)  
Internet: [www.heraeus-thickfilm.com](http://www.heraeus-thickfilm.com)

#### Asia [TH]

Heraeus Materials Technology Shanghai Ltd.  
No. 1 Guang Zhong Road  
Zhuanquiao Town, Minhang District  
201108 Shanghai  
People's Republic of China  
Tel: +86 (21) 3357 - 5688  
E-Mail: [th.hmmts@heraeus.com](mailto:th.hmmts@heraeus.com)  
Internet: [www.heraeus-thickfilm.com](http://www.heraeus-thickfilm.com)