

Dielectrics

IP 065

High Temperature Overglaze

Description

IP 065 is a green, screen printable, high temperature overglaze for printing of larger areas. Its use is to protect top layer conductor tracks from moisture and works as a solder stop.

Key Benefits

- High temperature glaze
- Insulating layers for circuit protection vs moisture and solder
- Free of cadmium and nickel
- REACH² and RoHS³ compliant

Processing

1. Spatulate well prior to processing. When stored in a fridge the paste should have acquired room temperature before being opened to avoid condensation.
2. Print through a 200 – 325 mesh stainless steel screen. Total thickness: 50 – 100 µm
3. Let the print settle at room temperature for 5 – 10 minutes.
4. Dry at 150°C for 10 – 20 minutes.
5. Fire at 850°C (peak) for 10 minutes, and with a total firing cycle time of 30 minutes.

Thinner

HVS 100

Typical Properties (Pastes)

Form:	Thixotropic paste
Viscosity:	20 – 40 Pas (25°C, D = 100 s ⁻¹)
Solids:	75.0 % ± 1.5 %
Shelf Life:	6 months from date of shipment with correct storage (in a dry, cool (2 to 23 °C) and dark place with container tightly shut)

Typical Properties (Fired)¹

Color:	Green (semi-transparent)
--------	--------------------------

Compatibility

Conductors:	C 1200 Series C 2000 Series C 1075 Series C 1076 SD
Dielectrics:	IP 9117 Series

Dielectrics

IP 065

High Temperature Overglaze

- 1 Typical property based on laboratory test methods. For optimum results all materials should be fired in a profiled furnace supplied with dried, hydrocarbon and other contaminant free air (PP-1)
- 2 REACH compliant according to the Annex XIV (Feb. 17, 2011) of Commission Regulation (EU) No 143/2011 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; we define a material as REACH compliant, as long as substances used are not recorded in the Annex XIV.
- 3 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. l. of the EU Directive e.g. related to Pb)

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
Internet: 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
Internet: 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.hmts@heraeus.com
Internet: www.heraeus-thickfilm.com