

Dielectrics

IP9241 (CL90-10841)



Pb and Cd Free Blue Dielectric

Description:

IP9241 is a Pb and Cd free blue dielectric paste that can be fired between 850°C and 950°C. It contains a unique glass system that allows for application onto alumina and alumina nitride substrates. IP9241 has a dense fired film and is compatible with a variety of conductors designed for use on alumina and aluminum nitride.

● Key Benefits:

- ROHS compliant*
- REACH compliant**
- Excellent electrical properties
- Wide firing window

● Typical Properties:

Dielectric Constant:

7.0 – 10.0 @ 1KHz

Dissipation Factor:

< 0.5% @ 1KHz

Insulation Resistance:

> 10⁹ ohms @ 100 Volts DC

Breakdown Voltage:

> 500 VDC per mil (3 individually fired layers)

Viscosity:

40 - 80Kcps; Brookfield RVT,
SC4-14 spindle with 6R utility cup
@ 10 rpm, 25°C

Solids:

73.5 ± 1.5%

● Recommended Processing Guidelines:

Printing:

200-280 mesh screen
0.5 mil emulsion

Allow wet prints to level at room temperature for 5 minutes

Drying:

150°C for 10 minutes

Firing:

850-950°C peak temperature
Dwell time of 10 minutes.

Thickness:

Fired: 15-25 microns (1 layer)
45-75 microns (3 layer s)

Thinner:

Heraeus RV-507 (Texanol)

Warranty:

TBD

Storage:

Store in a dry location at 20°C-25°C with container lid safely fastened.

DO NOT REFRIGERATE.

Allow paste to come to room temperature prior to opening. Spatulate well before using, as settling may occur during storage.

RH1015.1

*RoHS Statement

RoHS compliant according to the latest (as per the data sheet revision date) Directives (European Union) of the Restriction of Hazardous Substances (RoHS) and its subsequent amendments (including the exemptions related to Pb).

**REACH Statement

REACH compliant according to the latest (as per the data sheet revision date) Annex XIV to the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) by European Chemicals Agency and its subsequent amendments; the material does not contain any substance listed in Annex XIV.

Dielectrics

IP9241
(CL90-10841)



Pb and Cd Free Blue Dielectric

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.

Americas [CC]

Heraeus Precious Metals North America
Conshohocken LLC
Electronic Materials Division
24 Union Hill Road
West Conshohocken, PA 19428
USA
Phone: +1 (610) 825-6050
E-Mail: techservice_tf@heraeus.com

www.heraeus-electronics.com

Europe [CC]

Heraeus Precious Metals GmbH & Co. KG
Electronic Materials Division

Heraeusstr. 12-14
63450 Hanau
Germany
Phone: +49 (6181) 35-5466
E-Mail: cc-info@heraeus.com

www.heraeus-electronics.com

Asia [CC]

Heraeus Materials Technology
Shanghai Ltd.

No. 1 Guang Zhong Road
Zhuangqiao Town, Minhang District
Shanghai 201108
People's Republic of China
Phone: + 86 (21) 3357-5688
E-Mail: cc-hmts@heraeus.com
www.heraeus-electronics.com