

Dielectrics

IP9105HT/IP9105HTB

Insulating Underglaze

Description:

IP9105HT(B) is an insulating glaze used for porcelain steel coating applications and high temperature applications. IP9105HT(B) was specifically designed for use in circuits exposed to operating temperatures in the 475°C range. IP9105HT(B) may be used in conjunction with Heraeus high temperature resistor systems and conductor materials.

IP9105HT fires to a gloss white surface. IP9105HTB fires to a blue surface.

● **Key Benefits:**

- High temperature dielectric
- Can be used on a wide variety of substrates including steel
- Standard resistors and conductors are compatible on top
- RoHS compliant

● **Typical Properties:**

Dielectric Constant:

10 @ 1 KHz

Dissipation Factor:

0.15% at 25°C

Coverage:

190 cm²/g.

Viscosity:

270-330 Kcps, Brookfield HBT,
#6 spindle @ 10 rpm, 25°C.

Solids:

70.0 ±2.0%

● **Recommended Processing Guidelines:**

Printing:

325 mesh stainless steel screen
0.5 mil emulsion
1.1 mil wire
Two layers each fired individually is recommended for optimum yield.

Drying:

Dry at 150°C for 10 minutes.

Firing:

915°C peak temperature
Dwell time of 8-10 minutes

Thickness:

Dried: 20 microns
Fired: 11 microns

Thinner:

RV-372 (Terpineol)

Warranty:

Material guaranteed to meet specifications for 6 months from date of shipment.

Storage:

Store in a dry location at 5°C-25°C.
DO NOT REFRIGERATE.
Allow paste to come to room temperature prior to opening.
Spatulate well before using.

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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.

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