

Technical Data Sheet

THICK FILM MATERIALS

Product Type: Dielectrics

Product Name: IP9038A



Pb and Cd Free Resistor Overglaze

Description

IP9038A is a Pb, Cd and Ni free green overglaze designed for printing and firing over thick film resistors. IP9038A provides improved trimmed resistor stability and environmental protection. IP9038A has been proven to withstand plating solutions. IP9038A has excellent process insensitivity and is compatible with all Heraeus air-fireable resistor series. IP9038A is available in several color versions including blue, green (IP9038A), yellow (IP9038Y), light brown (CL90-10302), dark brown (CL90-10303), black (IP9038Black), white (IP9038 White) and Clear (CL90-10238).

Key Benefits

- REACH¹ and ROHS² compliant
- Minimizes resistance shift on re-fire
- Pinhole free
- Single coat application
- Resistant to plating solutions

Typical Properties

Coverage

160 cm²/g at 10 µm fired film thickness

Viscosity

140 – 180 Kcps, Brookfield HBT, SC4-14 spindle and 6R utility cup at 10 rpm, 25 °C

Solids

75.0 ± 2.0 %

Recommended Processing Guidelines

Printing

280 – 325 mesh stainless steel screen
0.5 mil emulsion
1.1 mil wire

Drying

Allow to level for 10 minutes before drying
150 °C for 10 minutes

Firing

500 °C (6 – 8 minutes) Dwell time
520 °C (4 – 6 minutes) Dwell time

Thickness

Dried: 18 – 22 µm
Fired: 10 – 12 µm

Thinner

RV-372

Warranty

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

Storage

Store in a dry location at 5 – 25 °C.

DO NOT REFRIGERATE.

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

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Legend:

1) REACH compliant according to the latest ** Annex XIV to Regulation (EC) 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; the material does not contain any substance listed in Annex XIV.

2) RoHS compliant according to the latest ** Directives (European Union) of Restriction of Hazardous Substances ("RoHS") and its subsequent amendments (including the exceptions related to Pb)

* See the data sheet issue date (DD/MM/YY) as reference of validity of latest edition which is available on request

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