

## Technical Data Sheet

### THICK FILM MATERIALS

Product Type: Dielectrics

Product Name: IP9002



### Low Firing Overglaze for Aluminum Nitride

#### Description

IP9002 is a Pb, Cd, and Ni free low firing green overglaze that is resistant to various plating solutions. It has a low thermal expansion coefficient allowing for applications which utilize aluminum nitride substrates. It is compatible with various Heraeus conductors designed for aluminum nitride.

#### Key Benefits

- REACH<sup>1</sup> and ROHS<sup>2</sup> compliant
- Excellent plating solution resistance
- Pinhole free
- Low thermal expansion coefficient (CTE)
- Chemically durable

#### Typical Properties

##### Coverage

170 cm<sup>2</sup>/g at 25 µm wet film thickness

##### Viscosity

60 – 80 Kcps, Brookfield HBT, SC4-14 spindle with 6R utility cup at 10 rpm, 25 °C

##### Solids

76.0 ± 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 – 600 °C peak temperature  
Dwell time of 5 – 7 minutes

##### Thickness

Dried: 20 - 22 µm  
Fired: 8 - 12 µm

##### Thinner

RV-507

##### Warranty

TBD

##### Storage

Store in a dry location at 20 – 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

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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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