

Component Metallizations

LP11-4493



Platinum Conductor

Description:

LP11-4493 is a Pb free fritted platinum paste, which fires to pure metal surface. This material is particularly suited for poorly controlled firing atmospheres and profiles.

● Key Benefits:

- RoHS compliant*
- Reach compliant**
- Chemically resistant
- Can be used on alumina, zirconia or titania bodies

● Typical Properties:

Resistivity:

≤ 50 milliohms per square
at 12 microns fired film thickness

HTCR/CTCR (ppm/°C):

< 3400/<3600

Adhesion:

80 x 80 mil pad on alumina @ 950°C

62Sn/36Pb/2Ag @ 235°C, RMA flux

Initial: >1.5 lbs.

100 Hrs. @ 150°C > 2.0 lbs.

10Sn/88Pb/2Ag @ 365°C, RMA flux

Initial: > 4 lbs.

100 Hrs. @ 150°C > 4.0 lbs.

Solderability:

62Sn/36Pb/2Ag @ 235°C and 10Sn/88Pb/2Ag @ 365°C,

5 sec. dip, RMA flux, 80 x 80 mil pad

> 85%

Solder Leaching:

62Sn/36Pb/2Ag @ 235°C and 10Sn/88Pb/2Ag @ 365°C, RMA

flux, 80 x 80 mil pad

< 20% loss after 6 x 10 sec. dips

Viscosity:

5.5 – 10.3 Kcps, Paar physica cone and plate

@ 300sec⁻¹, 25°C

Solids:

85.25 ± 0.25%

● Recommended Processing Guidelines:

Printing:

280 – 325 stainless steel mesh screen
0.5 mil emulsion

Drying:

90°C - 150°C peak temperature
Cycle time of 10 minutes

Firing:

840-950°C peak temperature
Dwell time of 9-11 minutes

Thickness:

Dried: 18-20 microns

Fired: 11-13 microns

Thinner:

Heraeus 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 as separation can occur during
storage.

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*RoHS Statement

Compliant according to Directives (European Union) No 2011/65/EC of Restriction of Hazardous Substances ("RoHS") and its subsequent amendments (including the exceptions No. 5 and 7 of the EU Directive e.g. related to Pb bounded in a glass matrix as oxide PbO)

**REACH Statement

Compliant according to the Commission Regulation (EU) No 143/2011 of Feb. 17, 2011 amending Annex XIV 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.

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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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