Heraeus

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.

YY0911.6

***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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