

## Conductors

### C8729



### Plateable Silver Conductor

**Description:**

C8729 is a lead, nickel and cadmium free plateable silver conductor that yields a smooth, dense film. It exhibits high adhesion. C8729 can be multiple fired without any loss of performance. C8729 is an excellent choice for plating applications, such as copper, nickel, etc.

● **Key Benefits:**

- Lead, nickel and cadmium free
- Excellent fired film density
- Low resistivity
- High adhesion
- High speed printing
- Feed through hole application

● **Typical Properties:**

**Resistivity:**

< 2.5 milliohms per square  
at 12 microns fired film thickness.

**Adhesion (after plating):**

2x2 mm pad  
Initial: ≥10 lbs  
Aged: ≥8 lbs (500 hrs. @ 150°C)  
500 thermal cycles (-55°C to +125°C)  
≥10 lbs

**Al wire bondability:**

1.25 mil wire  
Initial: >20 grams  
500 hrs @ 150°C: >10 grams

\*Note: all failures were wire breaks

**10mil wire:**

Initial: >600 grams  
500 hrs @ 150°C: >550 grams

\*Note: all failures were wire breaks

**Solderability (after plating):**

5 second dip @ 230°C  
62Sn/36Pb/2Ag, RMA Flux  
≥ 95%

**Solder Leaching:**

62Sn/36Pb/2Ag, 230°C  
10sec dips RMA flux

	#of Dips	% Line Loss
	1	≤ 10%
After plating	6	≤ 5%

**Coverage:**

80 cm<sup>2</sup>/g at 12 microns fired film thickness.

**Viscosity**

60-100 Kcps - Brookfield HBT,  
SC4-14 spindle and 6R utility cup  
@ 10 rpm, 25°C

**Solids:**

81.5% ± 1%

● **Recommended Processing Guidelines:**

**Printing:**

280 mesh stainless steel screen.  
0.5 mil emulsion  
printing speed > 7 inches/second

**Drying:**

Leave at room temp. for 5-10 minutes.  
Dry at 150°C for 10 minutes.

**Firing:**

850°C peak temperature  
Dwell time of 10-12 minutes.  
Total cycle time 36-60 minutes.

**Thickness:**

Wet: 32-34 microns  
Dried: 22 - 26 microns  
Fired: 10 - 15 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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