

Conductors

C 6011

AuPdPt Conductor Paste for Fuel Sensors

Description:

C 6011 is an Au/Pd/Pt conductor paste for fuel sensor applications. It does not contain Ag, Cd or Ni.

C 6011 is optimized in hardness and surface density. It exhibits excellent mechanical resistance after firing.

Processing:

1. Spatulate well prior to processing. When stored in a refrigerator allow paste to come to room temperature prior to opening, to avoid condensation.
2. Print through a 200 - 325 mesh stainless steel screen. 0.03 – 0.04 mm \varnothing wire and 20 – 30 μ m emulsion.
3. Level at room temperature for 10 minutes.
4. Dry at max. 150 °C for 8 – 10 minutes.
5. Fire at 850 °C (peak) for 10 minutes, and with a total firing cycle time of 30 – 60 minutes.

Thinner:

HVS 100

Properties (Paste):

Form:	Thixotropic paste
Viscosity:	25 – 45 Pas, (25 °C, D = 100 s ⁻¹)
Solids:	84.0 +/- 1.5 %
Coverage:	c. 75 cm ² / g (FFT 10 μ m)
Shelf Life:	6 months with correct storage. 5 – 25 °C in a cool, dry, dark place, and with the container tightly sealed.

Properties (Fired) ¹:

Fired Film Thickness ² :	8 – 14 μ m
Line Definition:	\geq 125 μ m
Resistivity ² :	\leq 100 m Ω / \square (FFT: 10 μ m)
Solderability:	not solderable!

1 Typical properties based on laboratory test methods. For optimum results all materials should be fired in a profiled furnace supplied with dried, hydrocarbon-free and other contaminant-free air.

2 Measured after printing with a 325 mesh steel screen; screen thickness and emulsion thickness combined was c. 75 μ m, and the resultant printed track was 500 μ m wide.

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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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