

Conductors

TC 7601

(LPA 699-020) Ag / Pt Conductor Paste for LTCC (DPIS*)

* **Development Product Information Sheet**

Description:

TC 7601 is a Ag / Pt conductor which provides excellent compatibility with Heratape CT 800 during the cofiring process.

TC 7601 is optimized for top layer screen printing of conductor tracks.

The material may readily be used to print fine line patterns. After firing, the paste can easily be soldered and provides excellent adhesion.

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 stainless steel screen.
3. Level at room temperature for 5 – 10 minutes.
4. Dry at max. 80 °C for 10 – 30 minutes.
5. Fire at 850°C – 865 °C (peak) for up to 30 minutes and with a total firing cycle time of up to 12 hours (is often most practicable in a box oven).

Thinner: HVS 507

Properties (Paste):

| | |
|-------------|---|
| Form: | Thixotropic paste |
| Viscosity: | 65 – 85 Pas (25 °C, D = 50 s ⁻¹) |
| Solids: | 85.0 % +/- 1.0% |
| Shelf Life: | 12 months, with correct storage (5 to 25 °C, in a cool, dry, dark place and with the container tightly shut). |

Properties (Fired)¹:

| | |
|-------------------------------------|-------------------------|
| Fired Film Thickness ² : | 12.0 – 15.0 µm |
| Line Definition: | ≥ 150 µm |
| Resistivity ² : | ≤ 4.0 mΩ/□ (FFT: 12 µm) |

Compatibility:

| | |
|-------------|-----------------|
| Dielectric: | Heratape CT 800 |
|-------------|-----------------|

1 Typical property 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 (PP-1).

2 Measured after printing with a 200 mesh steel screen; screen thickness and emulsion thickness combined was c. 110 µm, and the resultant printed track was 500 µm 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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