TC 2603 is an Ag/Pt conductor with low resistivity and provides excellent compatibility with low temperature co-fired ceramic (LTCC) during the co-firing process. TC 2603 is optimized for screen-printing of top conductor solder pads and traces.

**Description**

TC 2603 is an Ag/Pt conductor with low resistivity and provides excellent compatibility with low temperature co-fired ceramic (LTCC) during the co-firing process. TC 2603 is optimized for screen-printing of top conductor solder pads and traces.

**Key Benefits**

- Compatible with LTCC
- Excellent results with Pb free solder
- Pb and Cd free
- REACH\(^1\) and RoHS\(^2\) compliant

**Typical Properties**

**Resistivity:**

≤ 9 mΩ/□ at 16 μm dried film thickness

**Viscosity:**

400 – 600 Kcps Brookfield HBT
SC4 – 14 spindle, 6R utility cup at 10 rpm, 25 °C

**Adhesion:**

80 x 80 mil pad
RMA flux 62/36/2 95/5 SnAg
Initial: ≥ 3.0 lbs ≥ 4.0 lbs
Aged: ≥ 2.0 lbs ≥ 3.0 lbs
(48 hours @ 150 °C)

**Solderability:**

RMA flux

62/36/2 95/5 SnAg
@ 225 °C @ 260 °C

10s: ≥ 50 % ≥ 50 %
10s + (3x2s): ≥ 95 % ≥ 95 %

**Solder Leaching:**

3 x 10 sec Dips, % Line Lost
62/36/2 95/5 SnAg
@ 225 °C @ 260 °C

≤ 5 % ≤ 5 %

**Solids:**

81.3 ± 2.0 %

**Recommended Processing Guidelines**

**Printing**

290 or 325 mesh stainless steel screen
0.5 mil emulsion

**Drying**

Maximum temperature 80 °C for 10 to 20 minutes

**Firing**

870 – 880 °C peak temperature
Dwell time at peak up to 30 minutes
Total cycle time of up to 12 hours (Most easily achieved in a box oven).

**Dried Film Thickness:**

16 – 20 μm

**Line Resolution:**

≥ 150 μm (6 mil)

**Thinner:**

RV-507

**Warranty:**

Material guaranteed to meet specifications for 6 months from date of shipment.

**Storage:**

Store in a dry location at 5 – 25 °C.

**DO NOT REFRIGERATE.**

Allow paste to come to room temperature prior to opening.
Spatulate well before using, as settling may occur during storage.
Technical Data Sheet

Co-Firing Silver/Platinum Top Conductor

Legend:

1) REACH compliant according to the latest * Annex XIV to Regulation (EC) of the European Parliament and of the council on the Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH") by European Chemicals Agency and its subsequent amendments; the material does not contain any substance listed in Annex XIV.

2) RoHS compliant according to the latest * Directives (European Union) of Restriction of Hazardous Substances ("RoHS") and its subsequent amendments (including the exceptions related to Pb)