

Silver Paste For Rear Tabbing Ag 2710 SC

Application: silver paste Ag 2710 SC is a new developed screen printable conductive paste for rear solar cell electrodes.

It combines limited silver content with high conductivity and good adhesion. It is designed with a unique Chimet SpA[®] technology based on a mixture of fine silver powders and special inorganic binders. Ag 2710 SC is heavy metal free.

BENEFITS

- High conductivity with limited silver content
- Low lay-down: $5.5 \pm 0.5 \text{ mg/cm}^2$
- Good Ag-Al interface for cell efficiency enhancement with different backside layouts
- Excellent solderability ($\geq 2.5 \text{ N/mm}$)
- Excellent printability
- Allow IR, induction and standard soldering processes

GENERAL PROCESS CONDITIONS

Printing: typical industrial parameters: 230 – 300 mesh stainless steel screen, emulsion 4 – 15 μm thickness. Snap off 1.2 – 1.5 mm, speed 160 – 250 mm/s, force 60 – 80 N.

Drying & Firing: compatible with standard industrial processes. Compatible with lead and lead free aluminium pastes.

Table 1. TYPICAL PROPERTIES

Viscosity^{#1}

75–100 Pa*s@10rpm

Solid content

59.85 % \pm 0.5%

Conductivity

<4.0 m Ω /□@10 μm

Wet cov. (300-230/3 μm EOM)

5.0–6.0 mg/cm²

^{#1} Brookfield DV-II, chamber 6, spindle 14, 25.0 \pm 0.5 $^{\circ}\text{C}$

SHELF LIFE

6 months when properly stored in tightly closed containers at room temperature (5 $^{\circ}$ ÷25 $^{\circ}\text{C}$).

RECOMMENDATION

Before use please stir paste gently (to avoid air entrapment) with a spatula for homogenisation (30'' to 1'). Best conditions are achieved when a jar rolling is adopted. Keep paste at room temperature for 12h before opening container.

DISCLAIMER

The data published in this document come from experiments carried out in our laboratories and performed in conditions believed to be the most commonly

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