Ag 900 EI

Application: Ag 900 EI is a thermoset electrically conductive ink suitable for application by screen printing; it is a low temperature silver filler ink for rigid printed circuit boards on different substrates as epoxy paper, phenoxy paper, glass and metal due to its high adhesion after curing. It allows screen printing of conductive tracks, jumpers and *Z-axis* (through hole printing).

BENEFITS

- Low firing temperature
- Good adhesion on different substrates
- Good conductivity
- Designed to give a good balance between long open time on screens and short drying time in subsequent drying processes
- Low odour and no phenol contained

Table 1. TYPICAL PROPERTIES

Conductive filler

Ag powder, post treated

Total solid

78 – 80%

Viscosity #*[3]

20 – 30 Pa*s

Resistivity

< 15 mΩ/□ @ 25 µm

Thickness #*[1]

7 – 10 µm

STANDARD TEST CONDITIONS

Printing: polyester screen 70 to 90 wires. Stainless steel screen 200 to 280 mesh. A polyurethane squeegee with a shore hardness between 60 and 70 is recommended. Emulsion in the range 30 to 60µm is required.

Curing #*[2]: 30' @ 150°C. Best conductivity is achieved when a predry (10' @ 70° - 90°C) before curing is take place.

#*[1] depending on screen emulsion

#*[2] curing conditions are to be considered as a guideline; they are strongly dependent on application and customer's equipment

#*[3] **Viscosity test:**
Brookfield Viscometer *DV-II+* Pro; spindle 14, 10 r.p.m., 25.0±0.5°C

SHELF LIFE

Min. 3 months when properly stored in tightly closed containers at room temperature (20° - 25°C). It is strongly recommended to store in the range 4° - 8°C to guarantee a minimum shelf life of 6 months; when opened stir paste gently with a spatula to avoid bubbles entrapment and good homogenisation.

THINNING

Use thinner 0340IT to replace solvent or modify viscosity. Higher percentage than 1% could affect resistivity.

CLEAN UP SOLVENT

Dibasic esters are strongly recommended to clean all the voids of the screen followed by a more volatile solvents as, for example but is not limited to, 2-butanone.

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 accepted by the industry. It is the end-user's responsibility to check whether this product can be efficiently used in his specific process and under his specific industrial conditions which Chimet can neither control nor foresee. Chimet makes no warranties expressed or implied arising from the product use. Chimet specifically disclaims any liability for consequential or incidental damages of any kinds, including lost profits.

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