

Ag 512 EI

Application: Ag 512 EI is an electrically conductive ink suitable for application by screen printing; it is a low temperature silver filler ink designed to show good conductivity and good adhesion on treated and untreated polyester substrates (for example, but it is not limited to, Autostat[™] CT5, Autostat[™] CUS5^{#1}). The rheology allow good resolution in low voltage circuitry as membrane switch, plastic keyboards and special circuits as RFID Antenna^{#2}.

#1: depending on wet thickness and curing conditions could be observed better adhesion on treated Autostat[™]

#2: minimum line width 400 µm

BENEFITS

- Low firing temperature
- Good adhesion on different plastic substrates
- Good conductivity
- High flexibility
- Designed to give a good balance between long open time on screens and short drying time in subsequent drying processes

STANDARD TEST CONDITIONS

Printing: stainless steel screen 230 – 280 mesh, polyester screen 77 to 99 wires. A polyurethane squeegee with a shore A durometer between 70 and 80 is recommended.

Curing: 30' @ 150°C (best condition in static oven) or 5-10' @ 125°C (convection oven).

THINNING

Use thinner 0320IT to replace solvent. Higher percentage than 1% could affect resistivity.

Table 1. TYPICAL PROPERTIES

Viscosity

10 – 25 Pa*s (pseudoplastic paste)

Fineness of grind

< 12 µm

Thickness

6 – 10 µm

Abrasion resistance (ASTM D3359)

5B

Resistivity

< 15 mΩ/□ @ 25 µm

Viscosity test:

Brookfield Viscometer *DV-II+* Pro; spindle 14, 10 r.p.m., 25.0±0.5°C.

SHELF LIFE

Min. 6 months when properly stored in tightly closed containers at room temperature (< 25°C).

CLEAN UP SOLVENT

Butylene, propylene or ethylene glycol ethers or corresponding acetates. Dibasic esters.

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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