

# Ag 511 EI

**Application:** Ag 511 EI is an electrically conductive ink suitable for application by screen printing; it is a low temperature silver filler ink designed to show high conductivity and good adhesion on treated and untreated polyester substrates (for example, but it is not limited to, Autostat<sup>™</sup> CT5, Autostat<sup>™</sup> CUS5<sup>#1</sup>). The high conductivity allow fine line resolution in low voltage circuitry as membrane switch and plastic keyboards<sup>#2</sup>.

<sup>#1</sup>: depending on wet thickness and curing conditions could be observed better adhesion on treated Autostat<sup>™</sup>

<sup>#2</sup>: minimum line width 300 µm

## BENEFITS

- Low firing temperature
- Good adhesion on different plastic substrates
- High 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 – 300 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

< 12 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

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