

# Electrically conductive ink Ag 520 EI

## APPLICATION

Ag 520 EI is a silver filled electrically conductive and screen printable ink designed to offer a stretchable conductor. Typical application includes, but it is not limited to, low voltage circuitry on TPU substrates.

## Benefits

- high adhesion on different substrates including TPU and synthetic fabrics
- low sheet resistance
- good resistance to light discoloration
- compatible with wide variety of fabric and film substrates
- good print quality
- fast curing

## PROCESSING

### 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. Emulsion 20÷40 µm.

### Curing conditions

5'-10' @ 125°C. Infra red drying can be successfully used.

## Clean-up solvents

Diethylene glycol monoethyl ether acetate or DBEs

## Thinning

Use thinner 0320IT to replace solvent or to dilute the ink. Higher percentage than 1% could affect sheet resistivity.

**Table 1. TYPICAL INK PROPERTIES**

Appearance	thick yellowish colored ink
Viscosity #1	20 ÷ 30 Pa·s
Solid content	73 ± 2 %
Silver content	66 ± 0.5 %
Hegman Gauge	< 12 µm

**Table 2. TYPICAL CURED PROPERTIES**

Sheet resistivity (/square/mil)	< 20 mΩ
Thickness	4÷8 µm
Soldarable	NO

### #1 Viscosity test:

Brookfield DV-II+ Pro, 10rpm #14, 25±0.5°C

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## STORAGE AND SHELF LIFE

Min. 6 months when properly stored in tightly closed containers at room temperature (5-25°C). Some settling of solids may occur during storage and ink should be thoroughly mixed prior to use.

## SAFETY AND HANDLING

For safety and handling information pertaining Ag 520 EI, read the safety material data sheet (SDS).

## DISCLAIMER

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