

TECHNICAL SPECIFICATIONS

PRODUCT DESCRIPTION

SILVER ELECTRON CHEMICALLY AND THERMALLY RESISTANT (SECTR) is a solvent-based ink presented in a two-component system.



APPLICATIONS

Printing on untreated and TCA-treated PET substrates, polyimide, PVC and paper.

The above-mentioned substrates may differ according to their origin. It is therefore essential to carry out preliminary test.

MAJOR ADVANTAGES

Designed for applications requiring chemical and thermal resistance.

Can be cured at very low temperatures, ideal for fragile substrates.

Bio-based ink.

ELECTRICAL PROPERTIES

Resistivity $\leq 10 \text{ m}\Omega/\text{sq/mil}$

PRINTING

Printers: Screen printing for automatic, semi-automatic, and manual machines.

Screen: Polyester or stainless steel mesh between 79 and 120 threads/cm.

Squeegees: polyurethane Shore 65, good sharpness.

Ink preparation (SECTR-I01): Refer to mixing conditions below

Cleaning: Use SOLVCP-S01. Using another solvent may cause the ink to precipitate in the screen.

THICKNESS PRINTING

90 threads/cm polyester mesh : 5-8 microns.

DRYING AND CURING

Thermal curing: 120°C for 5 minutes.

For lower temperature curing, please refer to the provided graphics.

MIXING CONDITIONS

Ink containers are pre-measured. Put the entire SECTR-M01 pail into the SECTR-P01 pail.

For smaller quantities, mix in the following ratio: 34.2% SECTR-M01 / 65.8% SECTR-P01.

Mix thoroughly with a spatula or mixer at 500 RPM until homogeneous.

PACKAGING

Polypropylene pots (PP). Open pots for sampling must be carefully closed as soon as possible.

Ink properties	
TEST	PROPERTIES
Viscosity (Poises), Rotothinner 562 RPM, 25°C	45 ± 5
Coverage (cm ² /g) : Depending on thickness	320 - 400
Shelf-life on screen (min)	30

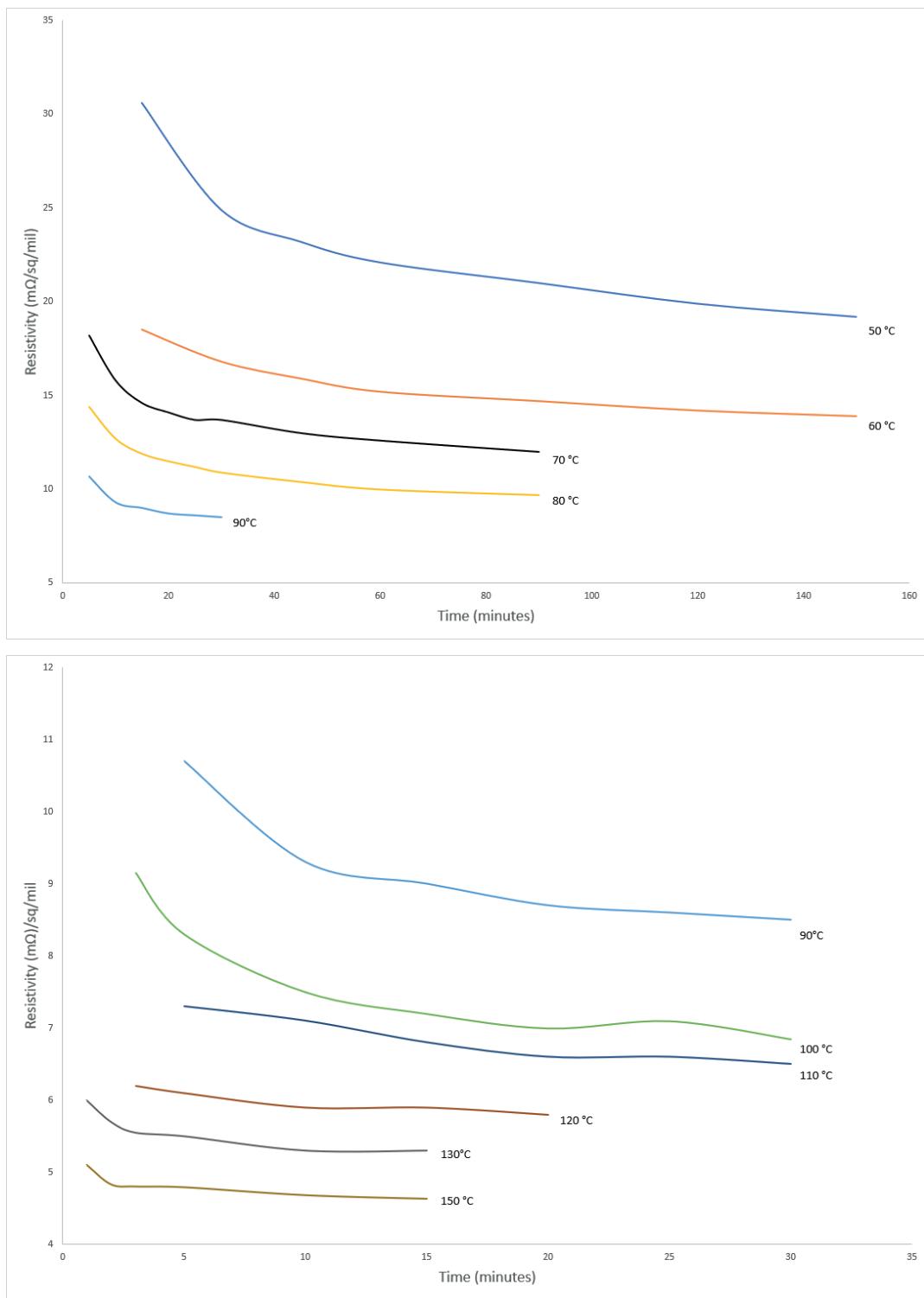
Physical properties of conductors printed on PET TCA (125 µm)	
TEST	PROPERTIES
Resistivity (mΩ/sq/mil) ; Curing at 120°C - 5 min	< 10
Resistivity* after sharp fold (1 cycle) (mΩ/sq/mil)	< 10
Adhesion (cross-cut test)	ISO Class 0 according to EN ISO 2409 :2020 standard

*Calculation based on a linear circuit with the following dimensions:

Length: 6 cm, Width: 1 mm, Thickness: 5 µm.

SILVER ELECTRON CHEMICALLY AND THERMALLY RESISTANT (SECTR)

Silver conductive ink



WASTE MANAGEMENT

Packaging contaminated with hazardous substances. Do not dispose into the environment. VFP Ink Technologies encourages all users to develop a responsible environmental policy.

HEALTH AND SECURITY

Refer to the MSDS. We recommend that you wear Personal Protective Equipment recommended by the MSDS and follow its handling precautions.

STORAGE

Each component (SECTR-M01 and SECTR-P01) can be stored for 6 months at room temperature in its original, tightly sealed container.

The prepared ink (SECTR-I01) can be stored in the refrigerator for 1 month.

Guarantee reserves: Although the data in this leaflet have been established after careful testing, it is provided as a guide; no liability can arise from this for VFP, it being understood that we advise you to carry out preliminary tests before any commercial draw. No seller, representative or agent has the right to give any guarantee or insurance, which would be in contradiction with what is said above. In any case, refer directly to our general conditions of sale.