

## TECHNICAL SPECIFICATIONS

### PRODUCT DESCRIPTION

The ECV003 is a UV varnish.

### APPLICATIONS

Compatible with PET, TCA, Polycarbonate, TPU, textile...  
*The above-mentioned substrates may differ according to their origin. It is therefore essential to carry out preliminary test.*

### MAJOR ADVANTAGES

Great electrical insulation. Varnish resistant to UV doses higher than recommendations.

### ELECTRICAL PROPERTIES

Breakdown voltage  $\leq$  4000 Volts (2 layers)

### PRINTING

**Machines:** automatic, semi-automatic and manual silkscreen machines.

**Screen:** Polyester or stainless-steel fabrics with a mesh from 79 to 120 threads/cm.

**Squeegees:** polyurethane 75/90/75 Shore A, good sharpness.

**Dilution:** no dilution must be performed before printing. However, a manual shaking is recommended before use.

**Cleaning:** we recommend ethyl acetate and ethyl ethoxy propionate as cleaning solvents.

### TYPICAL DEPOSITED THICKNESS

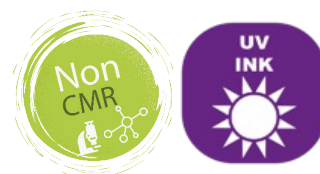
(77 threads/cm polyester mesh) : 30 microns (2 layers)

### ANNEALING CONDITIONS

Broad spectrum UV lamp (mercury/xenon)  
Max absorption peak : 359/365/380/383 nm

### PACKAGING

High density polyethylene pots (HDPE). Open pots for sampling must be carefully closed as soon as possible.



### Ink properties

TEST	PROPERTIES
Polymerization energy (mJoules/cm <sup>2</sup> )	>300
Density	1,13
Viscosity (Poises) Rotathinner 562 RPM, 25°C	95
Varnish color	Green
Range chemical compatibility	Silver Electron
Coverage (cm <sup>2</sup> /g)	400 - 440
Shelf-life on screen (min)	60 min

### Physical properties of conductors printed on PET TCA (125 $\mu$ m)

TEST	PROPERTIES
Breakdown voltage (Volts)	$\geq$ 4000
Isolation resistivity (TeraOhm)	> 2
Adhesion (cross cut test)	Level 0

### 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.

**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.

### 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

1 year in its original packaging stored between +5°C and +35°C.

## TECHNICAL SPECIFICATIONS

### PRODUCT DESCRIPTION

The ECV004 is a UV varnish.

### APPLICATIONS

Compatible with PET, TCA, Polycarbonate, TPU, textile...

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### MAJOR ADVANTAGES

Great electrical insulation. Varnish resistant to UV doses higher than recommendations.

### ELECTRICAL PROPERTIES

Breakdown voltage\*  $\leq$  4000 Volts (2 layers)

### PRINTING

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### TYPICAL DEPOSITED THICKNESS

77 threads/cm polyester mesh : 30 microns (2 layers)

### ANNEALING CONDITIONS

Broad spectrum UV lamp (mercury/xenon)

Max absorption peak : 359/365/380/383 nm

### PACKAGING

High density polyethylene pots (HDPE). Open pots for sampling must be carefully closed as soon as possible.



Ink properties	
TEST	PROPERTIES
Polymerization energy (mJoules/cm <sup>2</sup> )	>300
Density	1,13
Viscosity (Poises) Rotathinner 562 RPM, 25°C	75
Varnish color	Transparent
Range chemical compatibility	Silver Electron
Coverage (cm <sup>2</sup> /g)	400 - 440
Shelf-life on screen (min)	60 min

Physical properties of conductors printed on PET TCA (125 $\mu$ m)	
TEST	PROPERTIES
Breakdown voltage (Volts)	$\geq$ 4000
Isolation resistivity (TeraOhm)*	> 2
Adhesion (cross cut test)	Level 0

\*Measurements conducted according to IPC-2152 Standard with thermal cycles: 20/40/60/80/100/120 °C

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