

TECHNICAL SPECIFICATIONS

PRODUCT DESCRIPTION

The CARBON ELECTRON CELO01 is a solvent ink.

APPLICATIONS

Compatible with paper, cardboard, PET, treated polyester.
Overprinting on layers deposited with SE, SETF and FSE inks.

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

MAJOR ADVANTAGES

Excellent conductivity, easy to use with screen printing process. Good printability and printing uniformity on large areas, long shelf life on screen.

ELECTRICAL PROPERTIES

Resistivity $\leq 120 \Omega/\text{sq}/\text{mil}$ under 120°C (248°F).

PRINTING

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

Screen: all types of polyester or stainless-steel fabrics can be used with a mesh from 79 to 120 threads/cm.

Squeegees: polyurethane 65 Shore A, good sharpness.

Dilution: no dilution must be performed before printing. Such treatment would deteriorate the conductive properties of the printed patterns.

Cleaning: MP201.

THICKNESS PRINTING

90 threads/cm polyester mesh : 9 microns

DRYING AND CURING

Thermal curing: 120°C to 150°C (248 to 302°F) during 3 to 5min
IMSE process: 2 seconds

PACKAGING

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



Ink properties	
TEST	PROPERTIES
Viscosity (Poises), Rotathinner, 562 RPM, 25°C	85 - 105
Shelf-life on screen (min)	> 30
Coverage (cm^2/g) : Depending on thickness	360 - 400

Physical properties of conductors printed on PET TCA (125 μm)	
TEST	PROPERTIES
Resistivity ($\Omega/\text{sq}/\text{mil}$) ; Curing at 120°C - 5 mins	120
Resistivity* after net fold (1 cycle) ($\Omega/\text{sq}/\text{mil}$)	148
Adhesion (cross-cut test)	ISO Class 0 according to EN ISO 2409 :2020 standard.

*Calculation based on the linear circuit of the following dimensions:
Length: 6 cm, width: 1 mm, Thickness: 6 μm

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

1 year in its original packaging stored between $+5^\circ\text{C}$ and $+35^\circ\text{C}$.

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.