

## TECHNICAL SPECIFICATIONS

### PRODUCT DESCRIPTION

The PIEZO ELECTRON UV (PEUV) is an ink that cures under ultraviolet (UV) radiation.

### APPLICATIONS

Printing on untreated and TCA-treated PET substrates, overprintable on our silver ink range.

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

### MAJOR ADVANTAGES

PFAS-free piezoelectric ink requiring low polarization voltage. It can be integrated into thermally fragile devices.

### PHYSICAL PROPERTIES

Piezoelectric coefficient of 2 pC/N. The material is an electrical insulator.

### PRINTING

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

**Screen types:** Polyester or stainless steel, with mesh counts starting at 79 threads/cm to 120 threads/cm.

**Squeegees:** Polyurethane, 65 Shore A hardness, well sharpened.

**Cleaning:** MP201 solvent.

### TYPICAL DEPOSITED THICKNESS

With a 79 threads/cm polyester mesh: 30 microns (2 layers).

### CURING CONDITIONS

UV lamp (mercury).

Maximum absorption peaks: 359 / 365 / 380 / 383 nm.

The total UV dose required to properly cure the ink is 300 mJ/cm<sup>2</sup>.

### PACKAGING

Polypropylene (PP) containers. Opened containers for sampling must be carefully closed again as soon as possible.



Ink properties	
TEST	PROPERTIES
Viscosity (Poises), Rotothinner 562 RPM, at 25°C	170 ± 10
Coverage (cm <sup>2</sup> /g) : Depending on thickness	300 - 360
Shelf-life on screen (min)	60

Physical properties of layers printed on PET TCA (125 µm)	
TEST	PROPERTIES
Polarization voltage (V/µm)	20
Piezoelectric coefficient d33 (pC/N)	2
Curie temperature (°C)	130
Adhesion (cross-cut test)	ISO Class 0 according to EN ISO 2409 :2020 standard

### 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

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