

# Orgacon™ EL

transparent conductive screen printing paste



Orgacon™ EL Paste is a highly transparent, screen-printable conductive paste, based on waterborne conductive polymers. It is specifically designed to print transparent electrodes on all kinds of substrates.

Typical applications for this product are:

- Transparent (patterned) electrode for Electroluminescent Lamps and displays
- Prevention of electrostatic discharge (ESD)
- Membrane switches
- Digital (matrix) touchscreens

## The major advantages of ORGAICON™ EL Printing Paste:

- Applicable with manual, semi- and full automatic screen print equipment
- Screen-mesh dependent properties allowing for trade off between transmission and conductivity.
- Offers an exceptionally high transparency / conductivity ratio for the paste market
- Ultra-fast drying
- Excellent adhesion to pretreated PET films (e.g.: Autostat CT7 <sup>(1)</sup> )

## ORGAICON™ EL the polymer alternative to ITO

<sup>(1)</sup> Autostat CT7 is a registered trade mark of Autotype

### NOTE:

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## Product information

### EUROPE AND USA

Agfa-Gevaert NV  
SFC-Division  
Septestraat 27  
B-2640 Mortsel  
Belgium

IVO THYS  
Tel.: ++32 (0)3 444 8091  
Fax: ++32 (0)3 444 8094  
e-mail:  
ivo.thys.it@belgium.agfa.com

### ASIA

Agfa-Gevaert Japan, Ltd.  
8-1, Higashiyama 3- chome  
Meguro-ku  
Tokyo 153-0043  
Japan

HIROKO IINUMA  
Tel.: ++81 3 5704 3072  
Fax: ++81 3 5704 3146  
e-mail:  
hiroko.iinuma.hi@japan.agfa.com

Agfa-Gevaert Hong-Kong, Ltd.  
Cavendish Centre 14th Fl.  
23 Yip Hing Street  
Wong Chuk Hang  
HK-Hong Kong

BETTY NG  
Tel.: ++852 2873 9309  
Fax: ++852 2518 3050  
e-mail:  
betty.ng.bn@hongkong.agfa.com

Agfa Korea, Ltd.  
Keuk-dong Bldg. Rm. 2116  
60-1, 3-ka, Chungmu-Ro  
Chung-Ku  
C.P.O. Box 7350  
ROK-Seoul 100-705  
South-Korea

YOUNGSOOK PARK  
Tel.: ++822 2262 4291  
Fax: ++822 2262 xxxx  
e-mail:  
youngsook.park.yp@korea.agfa.com

Agfa Taiwan, Ltd.  
6F, 237 Sung Chiang Road  
Taipei 104  
Taiwan , R.O.C.

CHARLES TZENG  
Tel.: ++886 2 2516 8899 Ext.567  
Fax: ++886 2 2504 4819  
e-mail:  
agfati@ms18.hinet.net

## [1] Typical Properties

Wet paste:

Active Chemical:	Conductive Polymer
Binder:	Polymer
Solid Content:	1.2%
Viscosity at shear rate of 1000/sec:	1000 – 3000 mPa.sec
at shear rate of 10/sec:	10000 mPa.sec
Shelf Life:	12 months under original seal
Handling:	No mixing required before use
Theoretical coverage (Mesh dependant):	7 to 100 m <sup>2</sup> /kg

As a dry coating:  
ask for Application sheet.

## [2] Method of use

Screen printing

- Equipment: Manual, semi- and full automatic
- Screen type: monofilament polyester 20 – 170 T/HD (Threads/cm)  
recommended is 50 – 70
- Emulsion Thickness: 20 to 40 micron
- Emulsion Type: Water resistant screen emulsions to be used

Blending and dilution:

Orgacon<sup>TM</sup> EL paste is supplied ready-for-use and hence does not require dilution.

Substrate choice:

- Most PET with pretreatment for ink adhesion can be used (Print Treated PET).
- Not recommended for reverse configuration on top of a phosphor layer.
- Dried Orgacon<sup>TM</sup> EL paste itself can be overprinted with most graphic art inks as well as with protective encapsulants.

Applied dry coating thickness: 0.2 – 3 µm (depending on mesh size)

Drying cycle:

Orgacon<sup>TM</sup> EL paste can be dried immediately after printing. Typical drying conditions are 120 °C - 5 minutes, depending on mesh size.

Clean up solvents:

Water (High-pressure jet); clean up immediately after printing. Should clogging occur or ghost images appear, standard ghost image removers or household bleach can be used to clean the screen (please note that Bleach (NaOCl) might dissolve some types of screen emulsions).

## [3] Storage

Store the product between 5 °C and 35 °C, protect from freezing.

## [4] Health and Safety

See separate Material Safety Data Sheet.