

TranDuctive® E10 CS41220 is designed for **ITO replacement**. The ink is based on a mix of **silver nanowires** and **Zinc Oxide NP**, enabling electrode and ETL layer printing in a single process step. Targeted application is printed transparent conductive film.

Process: Slot die coating, blade coating, Spray.

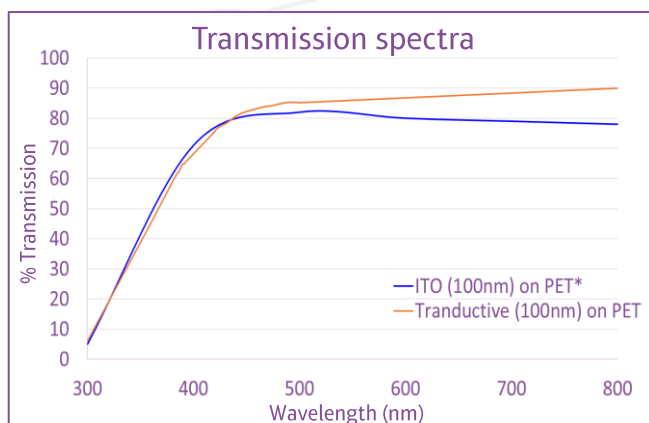
Ready-to-Use Ink

Material	Silver nanowires
Solvent type	Water/Alcohol mix
Viscosity (20°C)	55 ± 5 mPa.s
Density	0,8 g/cm ³
Storage stability	3 month (0-5°C)

Typical printing performances

Sheet resistance	10 ± 5 Ω/□
Transparency	80%
Roughness (Rq)	< 10 nm
Thickness	200 nm
Sintering Conditions	RT 90s + 90°C 90s
Bending radius	1,5 mm

Blade Coating: 24 µm wet thickness / 50 mm/s
PET Folex CF-T1/PD New quality



*ECS Journal of Solid State Science and Technology, 1 (5) Q106-Q109 (2012) – Crystallized Indium-Tin Oxide (ITO) Thin Films Grown at Low Temperature onto Flexible Polymer Substrates

Key advantages & benefits

- No need for additional investment equipment, zero CAPEX solution
- Allow manufacturing of very thin films for ultra flexible devices
- Low processing temperature enable use of various substrates and coating

Qualified Substrates (5B – ASTM D3359)

- PET : Melinex 406, Policrom STS H.02 – H.02, Folex CF_T1/PD New quality
- PEN : Teonex Q51
- PC

Cleaning

- Ethanol or IPA are recommended to clean TranDuctive® products

Features

- Superior stability of coated layer
- Long lasting conductivity
- Tuneable sheet resistance from 10 to 300 Ohm/sq
- Homogeneous sheet resistance over the printed surface
- High flexibility
- Very low roughness between 5 and 10nm
- Good transparency above 90%
- Easy to process: robust and standard deposition methods (slot die, spray, ...)

Printing guidelines

- Tranductive ink is warmed at room temperature (30 min) and gently re-homogenized (manually)
- Optional: Ink can be filter with a 60 µm-pore nylon filter by gravity
- Tranductive ink is printable by spray, doctor blade, slot-die and spin-coater.

Applications

Flexible OLED Display



Flexible Transparent OPV



Shipping & Packaging

- Standard sample order is 100 mL
- Standard bulk order is 1 L
- Standard delivery time is 10 days



TranDuctive® layer coated on PET

For more information on our conductive inks, please contact:



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Limited Warranty

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