

TRANSPARENT CONDUCTIVE ITO COATED FILM F2071018D1

This polyester film is produced by vacuum sputter deposition of indium tin oxide (ITO), this process provides excellent adhesion and uniform coating.

USE

This transparent, conductive film has many uses, for example as components of touch screens and other position sensors, and electroluminescent (EL) lamps.

PROPERTIES

Storage

Vacuum deposited ITO coatings are very thin, and are easily scratched or cracked if handled improperly. When using the film care should be taken not to bend or crease. It is important never to allow the ITO coated side to come into contact with a surface. Sliding the ITO coating over a surface will scratch the coating, resulting in elevated surface resistance and visible defects. ITO should be stored away from direct sunlight.

Visible Light Transmission

88%

Surface resistance

80 ohms/sq

Note: Transmission & Resistance values depend on the base film used. These are typical figures not intended to be used as specifications.

Polyester Thickness

175 microns

Shrinkage Value - 150°C/ 30mins

Heat stabilised 0.2%

Haze

0.9%

APPLICATION METHOD

We can offer A4 sheets of this material to be used along side our Electroluminescent Kit. Our standard kit includes the Phosphor, Silver, Dielectric, Carbon and Insulation Ink. Please contact sales@gwent.org for price and more information.

- 1) Check ITO Film to find out which side is conductive.
- 2) It is recommended that the Conductive side of the ITO is cleaned with IPA to remove any dirt or grease from the surface, allow the ITO to dry before printing.
- 3) The Phosphor ink is printed directly on to the conductive side of the ITO. This then needs to be cured @ 130°C for 3 minutes using a belt dryer or alternatively in a box oven for 10 minutes @ 130°C.
- 4) On top of the cured Phosphor print a single layer of dielectric is printed. This is then cured using the same method used for the Phosphor layer.
- 5) Repeat above with a second layer of dielectric.
- 6) The conductive layer (Silver or Carbon) is then printed on top of the dielectric layers and cured in the same way as the Phosphor and Dielectric layers.
- 7) It is recommended that the finished lamp be laminated using a self-adhesive heat sealed film or a suitable encapsulation ink, this will help to maintain the longevity of the lamp.

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