



# MITO 40 ohm

## Indium Tin Oxide Coated Polyester

Our range of Indium Tin Oxide (ITO) Coated Polyester Film has been developed to meet the ever demanding needs of the market for a high quality transparent conductive film.

Our products have been utilised in a wide range of applications such as Electroluminescent (EL) Lamps, Touch Screens, Position Sensors, Transparent Heaters, Shielding and Liquid Crystal Displays (LCD).

The MITO series is produced utilising a vacuum sputtering process that ensures an excellent coating uniformity and adhesion to the base film.

High visible light transmission and low reflection are optimised for improved end product performance.

Standard roll length is 100M in widths of 305mm (R3) and 610mm (R4), custom widths such as 1000 or 1200mm are also available.

PET Properties		MITO-40-125	MITO-40-175	Testing Method
Thickness (µm)		125	175	Micrometer
Light Transmission (%)		89	89	ASTM D 1003
Haze (%)		2.3	2.4	ASTM D 1003
Tensile Strength (Mpa)	MD	177	181	ASTM D 882
	TD	214	198	
Elongation @ Break (%)	MD	130	180	ASTM D 882
	TD	110	120	
Heat Shrinkage (%)	MD	1.1	0.9	ASTM D 1024 30 min @ 150°C
	TD	0.2	0.0	

ITO Properties		MITO-40-125	MITO-40-175	Testing Method
PET Thickness (µm)		125	175	Micrometer
VLT (%)		77	77	ASTM D 1003
Haze (%)		< 3	< 3	ASTM D 1003
Surface Free Energy		≥ 30 J.m.2	≥ 30 J.m.2	ASTM D 1003
Resistance Level (ohm/sq)		30-40	30-40	ASTM D 991
Uniformity (%)		± 20	± 20	ASTM D 991
Coating Adhesion (%)		100	100	ASTM D 3359
Shrinkage (%)	MD	0.5	0.5	30 min @ 140°C
	TD	0.2	0.2	30 min @ 140°C

### Product Handling:

As with all vacuum deposited thin film, it is relatively easy to scratch or crack the coating if the ITO layer is not handled with care. Care should be taken when the film is unwound from the roll to ensure it is not bent or creased.

It is important never to allow the ITO coated side of the film to come into contact with a table or any such surfaces that could potentially scratch the coating which could lead to increased surface resistance and visible defects.

Before adopting our products for commercial use, the user assumes responsibility for determining fitness of use in their particular application and process.

Memcon makes no warranties and assumes no liability in connection with any use of this information.

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