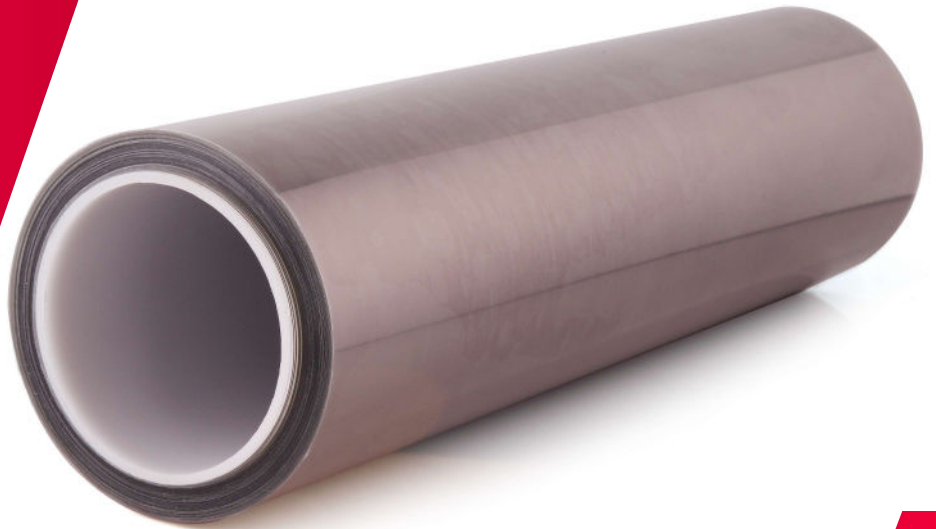




ITO COATED PET SHEET

USER MANUAL

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Working

ITO-coated PET films use many applications for bearing properties like high optical transmission and conductivity. It is ideal for touch screen devices, switchable films, and flexible displays. ITO on PET has vacuum blasted layer of Indium Tin Oxide on a transparent sheet of the flexible optical sheet. It is prepared by vacuum coating an optically clear film with a fine layer of ITO.

■ Product Series: TIPE

Technical Properties:

Specified ITO Sheet resistivity – ≤ 15 ohms/sq

Typical ITO Sheet resistivity – 8 - 10 ohms/sq

Transmittance at 550nm – $\geq 75\%$

ITO film Thickness – 1400 - 1500 Å

Sheet Thickness – 0.175 mm or 175 micron

Haze – NA

Heat resistance (R/R0) – ≤ 1.3 (@130 °C, 30 min)

Heat storage (R/R0) – ≤ 1.3 (@90 °C x 250 hrs)

High humidity storage (R/R0) – ≤ 1.3 (@60 °C x 250 hrs, 95% RH)

Heat cycle (R/R0) – ≤ 1.3 (@-30 °C ~ 85 °C x 50 cycle)

Adhesive – Excellent (@1.0 kg x 25 cycle with cloth)

Surface check – Smooth, no holes, no patches, and no stain

Storage temperature – -30°C + 40°C

■ **Product Series: TIPZ**

Technical Properties:

Specified ITO Sheet resistivity – 60 ohms/sq

Typical ITO Sheet resistivity – 70 ohms/sq

Transmittance @ 550nm – $\geq 8\%$

ITO film Thickness - 350 to 370 Å

Sheet Thickness – 0.175 mm or 175 micron

Haze – NA

Heat resistance (R/R0) - ≤ 1.3 (@13 °C, 30 min)

Heat storage (R/R0) - ≤ 1.3 (@9 °C x 250 hrs)

High humidity storage (R/R0) - ≤ 1.3 (@6 °C x 250 hrs, 95% RH)

Heat cycle (R/R0) - ≤ 1.3 (@-30°C ~85°C x 50 cycle)

Adhesives - Excellent (@1.0kg x 25 cycle with cloth)

Surface check - Smooth, no holes, no patches, and no stain

Storage temperature - -30°C to + 40°C



■ **Product Series: TIPX**

Technical Properties:

Specified ITO Sheet resistivity – ≤ 100 ohms/sq

Typical ITO Sheet resistivity – 0 - 110 ohms/sq

Transmittance at 550nm – $\geq 83\%$

Sheet Thickness – 0.175 mm or 175 micron

Haze – NA

Heat resistance (R/R0) – ≤ 1.3 (@130 °C, 30 min)

Heat storage (R/R0) – ≤ 1.3 (@ 0 °C x 250 hrs)

High humidity storage (R/R0) – ≤ 1.3 (@60 °C x 250 hrs, 95% RH)

Heat cycle (R/R0) – ≤ 1.3 (@-30 °C ~ 85 °C x 50 cycle)

Adhesives – Excellent (@1.0 kg x 25 cycle with cloth)

Surface check – Smooth, no holes, no patches, and no stain

Storage temperature – -30°C +40°C

■ **Physical Properties**

Configuration – Polyethylene terephthalate (PET) / ITO

Substrate – Optical clear grade PET film / Hardcoated PET film

Surface finished of glass – N/A

Passivation layer – No

ITO coating method – Magnetron sputtering at elevated temperature under vacuum

ITO work function – 4.8 4.9eV (measured by UPS) after proper cleaning

Surface Roughness – RMS1 10 nm, depending on the various product

Packing - Sheet/roll form

■ **Size Variant**

100mm x 100mm | 200mm x 100mm | 16inch x 16inch

■ **Important Note:**

1. Customization can be provided as per size or specifications.
2. Patterning is also done as per the design given by the client.

Applications

1. Liquid Crystal Devices
2. Touchscreens
3. Position Sensors
4. Electroluminescent Lamps (EL)
5. Electromagnetic Shielding Applications
6. Telecommunication
7. PDLC Smart Films
8. EMI Shielding
9. Tranperant Projection

Storage And Stability

This product should be stored at room temperature and Pressure, and its stability is indefinite. It should be placed in a clean environment.

Precautions and Disclaimer

These products are for R&D and industrial use, not for drug, household, personal, or other uses.

Packaging

It is supplied in bundles with highly-protective layers between individual sheets within a light-protected, moisture-free, specially manufactured paper sheet.

Handling

At the time of sheet handling, the researcher should use powder-free non-latex gloves, which should be handled carefully. While experimenting, if researched using a substrate with bare hands, the chances of contamination of coated surface due to finger oil are very high. Therefore it is advised to use nylon or polyester gloves. Each sheet is well packed in moisture-free paper, so they should not rub each other.

If any researcher wants to check the resistivity, it is advisable to measure with the help of 4 probe methods to get an accurate result.



Feel Free to Reach Us

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