

## Accentia® 430300 ITO Coated Films

### Description

Sheldahl's ACCENTIA® products provide transparent electrically conductive thin Indium Tin Oxide (ITO) coatings on polyester films. This ITO coating is deposited by state-of-the-art sputter technology. Typical applications for Sheldahl's ITO coated PET are:

Electroluminescent Lamps (EL), Liquid Crystal Displays (LCDs), transparent flexible circuits, static dissipation, heaters, EMI shields, solar cells and electronic signage.

### Features

- High stability, optically clear PET films.
- Uniform ITO coating with superb light transmission and color properties.
- Product provided in wide roll widths
- Specialty protection films, adhesive and hard coats available as custom options.

### Constructions

- **Film Thickness:** 2, 5 and 7 mil (50, 125, 175  $\mu\text{m}$ ) optically clear heat stabilized PET films. 2 and 3 mil (50, 75  $\mu\text{m}$ ) heat stabilized clear PEN films are available as custom order.
- **ITO Resistance Offered:** 60, 100, 200, 250, 300  $\Omega/\square$  Standard. Other resistance offered as special order.
- **Product Format:** Available as rolls or sheets with protection film applied to one or both sides, with optically clear PSA, and with ITO patterning as product options.
- **Width:** Master rolls are 1320mm (52") wide on 6" ID plastic cores. We will custom slit the master roll or sheet to your specification.

### Shelf Life and Storage

Shelf Life is > one year when kept at ambient conditions of 21°C and 50% RH in original unopened container.



### Product Offering and Part Numbers

Base Film	60 $\Omega/\square$	100 $\Omega/\square$	200 $\Omega/\square$	250 $\Omega/\square$	300 $\Omega/\square$
PET 5 mil	Custom	155959	158531	155960	159137
PET 7 mil	155952	155954	157393	155955	157349

### Quality

Sheldahl Technical Materials has been an industry leader in the coating of flexible films for over 50 years. Sheldahl products are manufactured using quality systems that conform to ISO9001 and TS-16949 quality standards. Key product characteristics are tested and monitored in accordance to applicable industry and strict internal standards. Certifications are available with product shipments.

### Ordering Information:

When ordering please specify:

- Film thickness
- ITO resistance
- Product roll width
- Applicable custom requirements.

### Contact Information:

Worldwide: Telephone: +1-507-663-8564

e-mail: [displayproducts@sheldahl.com](mailto:displayproducts@sheldahl.com)

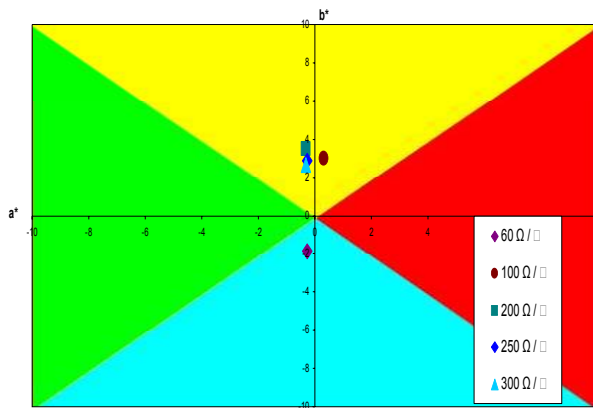
Come visit us at: [www.Sheldahl.com](http://www.Sheldahl.com)



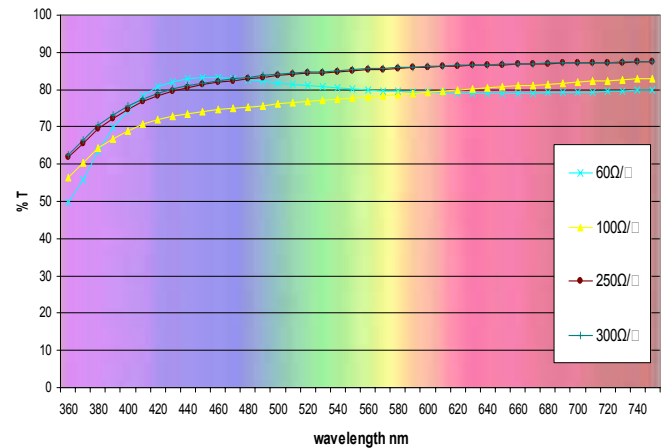
## Accentia 430300 ITO Coated Films Typical Product Characteristics:

Property	Units	60 Ω	100 Ω	200 Ω	250 Ω	300 Ω	Test Method
Average $R_s$	Ohm/sq	55 - 60	93 - 106	191 - 220	241 - 268	291 - 317	Four-Point Probe
%T @ 550nm	%	80 - 83	77 - 79	83 - 84	84 - 85	85 - 86	ASTM D1003
L*	%	92 - 93	91 - 91	93 - 93	94 - 94	94 - 94	ASTM D1003
ITO Adhesion	Level	5B	5B	5B	5B	5B	ASTM D3359
Haze	%	0.5 - 0.7	0.4 - 0.7	0.4 - 0.7	0.3 - 0.9	0.5 - 0.7	ASTM D1003
Etch	Seconds	59	34	20	15	<15	10% HCl
Heat Resistance	% $\Delta R_s$	1	1	1	5	5	130°C for 3 hours
Alkali Resistance	% $\Delta R_s$	10	10	10	10	10	5% NaOH 5 minutes
Adhesion Resistance	% $\Delta R_s$	< 1	< 1	< 1	< 1	< 1	Scotch Tape Test
Abrasion Resistance	% $\Delta R_s$	5	5	5	5	5	2 #/ 25 Cycles
RH Resistance	% $\Delta R_s$	5	5	5	5	5	60°C / 90% RH 100 hrs
Flex Resistance	% $\Delta R_s$	< 1	< 1	< 1	< 1	< 1	1K Cycles ¼" Mandrel

Color Chart (a\* and b\*)



Sheldahl %Transmission per ITO Resistance - Visual spectrum



\*The information contained herein is based upon typical data. Sheldahl makes no warranties expressed or implied as to its accuracy and assumes no liability arising out of its use by others. The user should determine suitability of Sheldahl materials for each individual application.

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