INSULECTRO

CLARITy™ POLYCARBONATES

PC811 TECHNICAL DATA

Insulectro Clarity™ PC811 Polycarbonates

Insulectro Clarity™ PC811 is a high polished film with low stress, excellent clarity, high temperature resistance and superior dimensional stability.

The film grade offers excellent light transmission. This makes them the ideal choice for LED/LCD windows and for applications where second surface printing is desirable, such as fascia panels for household appliances, audio/video equipment and automotive dials. Can be embossed or selectively textured by screen printing & plating processing for aesthetic & optic.



UL File Number: E254551

Gauge Variation <0.250mm ±10% ≥0.250mm ±5%

Insulectro Clarity® PC811 Films	
TEXTURE	Gloss/Gloss
THICKNESSES	5,7,10,15,20 mil
WIDTHS	36", 48"

PHYSICAL

	TEST METHODS	UNITS	VALUES
Specific Gravity	ASTM D792	g/cm³	1.2
Light Transmission	ASTM D1003	%	>89
Haze	ASTM D1003	%	<0.5
Yellowness Index	ASTM D1925	-	<1.0
Water Absorption Equilibrium 24 HRS	ASTM D570	%	0.35

MECHANICAL

	TEST METHODS	UNITS	VALUES
Tensile Strength	ASTM D882	psi MPa	8800 60
Elongation at Break	ASTM D882	%	>90
Impact Strength @ 10 mils	JIS-K6745	In-lbs	120
Tear Strength Propagation	ASTM D1922	g/mil	>30
Folding times (MIT)			
@0.25 mm	ASTM D2176-69	double folds	80
@0.50 mm	ASTM D2176-69	double folds	30

THERMAL

	TEST METHODS	UNITS	VALUES
Vicat Softening Temp	ASTM 1525-00 Modified B	°C	160
	ISO 306	°C	149
Heat Deflection Temp	ISO 75 Modified	°C	142

ELECTRICAL

	TEST METHODS	UNITS	VALUES
Dielectric Strength @10 mils	ASTM D149	V/mil	1,700
Volume Resistivity @25°C, 50% RH	ASTM D257	Ohm-cm	10^{16}
Surface Resistivity @25°C, 50% RH	ASTM D257	Ohm-cm	10^{15}

UL FLAMMABILITY

	TEST METHODS	UNITS	VALUES
@ ≥ 0.5mm non-halo & REACH conformable	UL BULLETIN 94	UL94	V-2
@< 0.5mm non-halo & REACH conformable	UL BULLETIN 94	UL94	HB
0.25mm @ ≥ 0.5mm brominated & REACH conformable	UL BULLETIN 94	UL94	V-2
@ < 0.25mm brominated & REACH conformable	UL BULLETIN 94	UL94	VTM-2

Source Your Substrates, Films, & Inks

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