INSULECTRO

CLARITy™ POLYCARBONATES

800 Series TECHNICAL DATA

Insulectro Clarity™ Polycarbonates

Insulectro Clarity™ PC835/835F/832/832F/836 graphics films/sheets are available in diverse combinations of textures with good mar resistance. The product line is produced under strict quality control standards to ensure surface consistency.

Smooth printing effects visually reduce glare in environmental applications.

PC835 is specifically designed to help reduce pinholes in demanding back-lit applications.

UL File Number: E254551
Gauge Variation <0.250mm ±10% ≥0.250mm ±10%



PRODUCTS

GRADES	TEXTURES	THICKNESSES	WIDTHS
PC835	Matte/Velvet	3,5,7,10,15,20 mil	36", 48"
PC832	Matte/Fine Velvet	3,5,7,10,15,20 mil	36"
PC835F	Fine Matte/Velvet	3,5,7,10,15,20 mil	36"
PC832F	Fine Matte/Fine Velvet	3,5,7,10,15,20 mil	36"
PC836	Matte/Suede	5,7,10,15,20 mil	36"

PHYSICAL

	TEST METHODS	UNITS	VALUES
Specific Gravity	ASTM D792	g/cm³	1.2
Light Transmission	ASTM D1003	%	>88
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	8500 55
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	60
@0.5 mm	ASTM D2176-69	double folds	20

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
Heat Shrinkage @ 135° C	ASTM D1204	%	<0.2

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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