

## Description

Evergreen PolyLite® PL101 is a double-sided polished, highly transparent polycarbonate film with good dimensional stability, heat resistance and mechanical properties. Common applications include printing, insulation, forming, optical, lamination, surface coating etc. Typical uses include panels, label nameplates, membrane switches, insulation, automotive instrument panels, light guide films, diffusion films, and forming applications such as helmets and toy car bodies. PolyLite® PL101 is available in thicknesses of 0.1mm-1.0mm rolls and sheets.

## Typical Property Values

Property	Item	Test Method	Unit	Value
Physical	Density	ASTM D792	g/cm <sup>3</sup>	1.2
	Water Absorption, 24hrs	ASTM D570	%	0.2
Optical	Light Transmission	ASTM 1003	%	90
	Haze	ASTM 1003	%	0.4
Mechanical	Tensile Strength	ASTM D882	MPa	≥60
	Tensile Elongation at Break	ASTM D882	%	130-150
	Impact Strength (0.75mm)	ASTM D256	J/m	>640
Thermal	Heat Deflection Temperature (1.82Mpa)	ASTM D648	°C	135
	Coefficient of Thermal Expansion	ASTM D696	10 <sup>-5</sup> /°C	7
	Coefficient of Thermal Exchange	ASTM C117	W/m.°C	0.19
Electrical	Dielectric Strength	ASTM D149	V/mil	1800
	Surface Resistivity	ASTM D257	Ω/square	>10 <sup>15</sup>
	Volume Resistivity	ASTM D257	Ω·cm	>10 <sup>16</sup>
UL Flammability	Film thickness <1 mm	UL94	/	VTM-2
	Film thickness =1 mm			V-2

# PolyLite® PL101 Film Specifications



## PolyLite® PL101 Rolls

Thickness		Roll Size	
mm	in	mm×m	ft×ft
0.100	0.004"	927×400	3'×1312'
		1220×400	4'×1312'
0.125	0.005"	927×400	3'×1312'
		1220×400	4'×1312'
0.175	0.007"	927×350	3'×1148'
		1220×350	4'×1148'
0.250	0.010"	927×300	3'×984'
		1220×300	4'×984'
0.375	0.015"	927×200	3'×656'
		1220×200	4'×656'
0.500	0.020"	927×150	3'×492'
		1220×150	4'×492'
0.760	0.030"	927×100	3'×328'
		1220×100	4'×328'

## PL101 Sheets

Thickness		Dimensions		Sheets / Pack	Packs / Pallet
mm	in	mm×mm	ft×ft	pcs	pcs
0.30	0.012"	915×1830	3'×6'	40	1000
		1000×2000	/		
0.50	0.020"	915×1830	3'×6'	20	600
		1000×2000	/		
		1220×2440	4'×8'		
0.60	0.024"	915×1830	3'×6'	20	400
		1000×2000	/		
0.70	0.028"	915×1830	3'×6'	20	400
		1000×2000	/		
		1220×2440	4'×8'		
0.80	0.032"	915×1830	3'×6'	15	375
		1000×2000	/		
		1220×2440	4'×8'		
1.00	0.040"	915×1830	3'×6'	10	300
		1000×2000	/		
		1220×2440	4'×8'		

### Remarks:

1. Masking is provided to protect the glossy surface. One side has medium tack transparent masking while the other has low-tack green transparent masking.
2. The above reported values are based on a material thickness of 0.25mm unless otherwise specified.
3. The data presented above represent values from our testing of the material. It is the responsibility of the user to test and confirm that our materials are suitable for their intended applications. All information and technical assistance is given without warranty or guarantee and is subject to change without notice.
4. Unless otherwise agreed to in writing, all products are sold strictly pursuant to our standard conditions of sale.
5. Please contact your PolyLite sales representative for any questions or inquires regarding special applications. PolyLite films should not be used for high requirement applications such as coating (sputtering, metalizing, hard coating) or lenses.