

## PETG SOLID SHEETS: EXTRUDED



PLASKOLITE PETG sheets are a thermoplastic co-polyester that provides excellent formability for manufacturing and combines exceptional clarity, strength and excellent chemical resistance. PLASKOLITE These sheets are produced with a unique balance between physical properties and processing capabilities. This allows thermoformed parts to have with precise molded details required for complex projects. The advantages of PETG sheets over other transparent thermoplastic sheets are their ease to handle, their capability to produce complex shapes, precise details, deep draws and compound curves without worrying about durability. The ease to produce custom fabrication and print allowing a greater freedom of design. Moreover, their low temperature thermoforming without pre-drying allows for easy and cost-effective thermoforming. In addition the low forming temperature without having to pre-dry allows for easy and cost effective processing.

### Applications



POP displays



Vending machines



Machinery guards



Supermarket trolley shelters



Signage

### Main advantages

- » High clarity and light transmission
- » Excellent impact strength
- » Ductile - excellent toughness
- » Excellent flexibility
- » Easy to clean - Chemically resistant to most common cleaners
- » Lightweight. About half weight of glass
- » Easily to handle, machine and fabricate allowing design freedom
- » Easy to print on
- » Cold curving capability
- » Easy to thermoform
- » Odor free
- » Halogen free
- » Fully recyclable
- » UV protection for outdoor use available upon request

### Dimensions

Dimensions		
Thickness	0.5 - 10.0mm, 0.020 - 0.394"	mm
Width	1000, 1250, 2050mm, 39.4", 49.2", 80.7"	mm
Length	600 - 6000 mm, 23.6 - 236"	mm

Sheets are also available cut to size, according to customer requirements

### Colors:

Clear, pigments may be added to obtain a wide range of tints per customer requirements.

### Grades:

PETG - Non-UV protected, for Internal use only  
 PETG UV - UV coextruded, 2 sides UV (specific thicknesses)

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## TYPICAL PROPERTIES

PROPERTIES	METHOD	UNITS	VALUE
<b>GENERAL</b>			
Density	ISO 1183	gr/cm <sup>3</sup>	1.27
Water Absorption	ISO 62 (1)	%	0.2
Flammability: < 3 mm	UL94		94HB
> 3 mm		94V-2	
<b>MECHANICAL</b>			
Tensile Stress at Yield	ISO 527-2	MPa, psi	53, 7690
Tensile Stress at Break	ISO 527-2	MPa, psi	26, 3770
Elongation at Break	ISO 527-2	%	> 60
Tensile Modulus	ISO 527-2	MPa, psi	2200, 319000
Flexural Strength	ISO 178	MPa, psi	70, 10200
Flexural Modulus	ISO 178	MPa, psi	2100, 304600
Impact Resistance (Charpy unnotched)	ISO 179/1fu	kJ/m <sup>2</sup> , ft-lbs/in <sup>2</sup>	NB
Impact Resistance (Izod notched)	ISO 180/1A	kJ/m <sup>2</sup>	11.5, 5.47
<b>OPTICAL</b>			
Refractive Index	ASTM D542		1.57
Light Transmission (3mm, 0.118" transparent sheet)	ASTM D1003	%	90
Haze ((3mm, 0.118" transparent sheet)	ASTM D1003	%	< 1
<b>THERMAL</b>			
Vicat Softening Temp. 1kg, 2.2lbs	ISO 306	°C , °F	83, 181
5kg, 11lbs			78, 172
Heat Deflection Temp. 0.45MPa, 65psi	ISO 75	°C , °F	72, 162
1.80MPa, 261psi			68, 154
Coeff. of Linear Thermal Expansion (-30°C - +23 °C, -22°F - +73°F)	ASTM D696	mm/mm·°C	7X10 -5/°C
		in/in/°F	3.8 x 10-5/°F
Service Temperature Range		°C	-40 - +60
		°F	-40 - +140
<b>ELECTRICAL</b>			
Dielectric Constant 1kHz	ASTM D150		2.6
1MHz		2.4	
Dissipation Factor tan 1 kHz	ASTM D150		0.005
1 MHz		0.023	
Dielectric Strength (Short Time, 500 V/sec) rate-of-rise	ASTM D149	kV/mm , Volts/mil	16.1 , 410
Surface Resistivity	ASTM D257	Ohms/square	>10 <sup>16</sup>
Volume Resistivity	ASTM D257	Ohm-cm	>10 <sup>15</sup>

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determines the suitability of our materials and suggestions before adopting them on a commercial scale.

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