



PLAZGAL PETG CLEAR PLASTIC SHEETS EXTRUDED POLYETHYLENE TEREPHTHALATE GLYCOL (PETG) SOLID SHEETS

PLAZGAL PETG sheets are a thermoplastic polyester that provides excellent formability for manufacturing and combines exceptional clarity, strength and excellent chemical resistance. Plazit-Polygal PETG sheets are produced with a unique balance between physical properties and processing capabilities that allow for fine thermo-forming and implementation of precise details required for special and complex projects.

The numerous 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, and their 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.

Applications



POP displays



Vending machines



Machinery guards



Supermarket trolley shelters



Signing



Glazing



Thermoforming

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

Properties	Method	Units	Value
General Properties			
Density	ISO 1183	gr/cm ³	1.27
Water Absorption	ISO 62 (1)	%	0.2
Flammability: < 3 mm > 3 mm	UL94		94HB 94V-2
Mechanical Properties			
Tensile Stress at Yield	ISO 527-2	MPa	53
Tensile Stress at Break	ISO 527-2	MPa	26
Elongation at Break	ISO 527-2	%	> 60
Tensile Modulus	ISO 527-2	MPa	2200
Flexural Strength	ISO 178	MPa	70
Flexural Modulus	ISO 178	MPa	2100
Impact Resistance (Charpy unnotched)	ISO 179/1fu	kJ/m ²	NB
Impact Resistance (Izod notched)	ISO 180/1A	kJ/m ²	11.5
Optical			
Refractive Index	ASTM D542		1.57
Light Transmission (3 mm transparent sheet)	ASTM D1003	%	90
Haze (3mm transparent sheet)	ASTM D1003	%	< 1
Thermal Properties			
Vicat Softening Temp. 1 kg Load 5 kg Load	ISO 306	°C	83 78
Heat Deflection Temp. 0.45 MPa 1.80 MPa	ISO 75	°C	72 68
Coeff. of Linear Thermal Expansion (-30°C - +23 °C)	ASTM D696	mm/mm·°C	7X10 ⁻⁵ /°C
Service Temperature Range		°C	-40 - +60
Electrical			
Dielectric Constant 1kHz 1MHz	ASTM D150		2.6 2.4
Dissipation Factor tan 1 kHz 1 MHz	ASTM D150		0.005 0.023
Dielectric Strength (Short Time, 500 V/sec) rate-of-rise	ASTM D149	kV/mm	16.1
Surface Resistivity	ASTM D257	Ohms/square	>10 ¹⁶
Volume Resistivity	ASTM D257	Ohm-cm	>10 ¹⁵

Dimensions		
Thickness	0.5 – 10.0	mm
Width	1000, 1250, 2050	mm
Length	600 – 6000	mm

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

Colors:

naturally colorless and clear. Pigments can be added in order to obtain a wide range of tints and colors, according to customer requirements.

Grades:

Plazgal PETG - Non-UV protected, for Internal use only

Plazgal PETG UV - UV coextruded, 2 sides UV (specific thicknesses)

DISCLAIMER: The data in this advertisement are provided in good faith and constitute general information without commitment and no warranty is given or implied. Our plastics products are a combustible thermoplastic that complies with various and national international standards, as customary in each country. Avoid exposure to excessive heat or aromatic cleaning solvents. Normal fire precautions should be taken to protect against combustion.

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