



PLAZCAST

CAST POLYMETHYL METHACRYLATE (PMMA) SOLID SHEETS

Bright clarity, excellent transparency and easy to thermoform. The PLAZCAST sheets provide long-life UV resistant products for a broad range of applications.

Sheets are produced according to ISO 7823-1:2003 standard.

APPLICATIONS



Glazing



Interior Design



Architecture



Bridges Barriers



Aquariums



Art Design



POP display stands



Acoustics Barriers

Main Advantages

- Highly transparent, 92% light transmission
- Low haze <1%
- Lightweight-Less than half weight of glass
- Bright and hard surface
- Excellent color stability
- Excellent dimensional stability
- Proved weather resistance. Life-long UV-resistant.
- Good chemical resistance to a wide range of substances
- 10-year limited warranty
- Easily thermoformed, machined, polished and reshaped
- Easily glue bonded
- Cold-curving capability
- Easily polished and reshaped
- Environment friendly: 100% recyclable
- Fully recyclable polyethylene protective film
- Easy to clean
- No carcinogenic or hazardous substances
- Non-toxic fumes emitted in fire, fires can be easily extinguished with water
- REACH and RoHS declarations

Typical Properties	Method	Units	Plazcast
General			
Density	ISO 1183	g/cm ³	1.2
Water absorption	ISO 62 (1)	%	0.3
Flammability	UL94		HB
Mechanical			
Tensile Strength	ISO 527-2	MPa	70
Elongation at break	ISO 527-2	%	4
Tensile Modulus	ISO 527-2	MPa	3300
Flexural Strength	ISO 178	MPa	104
Flexural Modulus	ISO 178	MPa	3000
Rockwell hardness	M scale		100
Impact Resistance (Charpy unnotched)	ISO 179/1fu	kJ/m ²	15
Impact resistance (Izod notched)	ISO 180/1A	kJ/m ²	1.5
Optical			
Refractive Index	ISO 489		1.49
Light Transmission (3mm transparent sheet)	ASTM D1003	%	92
Haze (3mm transparent sheet)	ASTM D1003	%	<1
Thermal			
Vicat Softening Temp. (50N)	ISO 306	°C	105-112
Heat Deflection Temp. (1.82 MPa)	ISO 75-1	°C	105
Coeff. of Linear Thermal Expansion	ISO 11359-2	°K ⁻¹	7x10 ⁻⁵
Thermal Conductivity	ASTM C177	W/mK	0.19
Maximum Continuous Service Temp.		°C	82
Electrical			
Dielectric Strength	DIN 53481	kV/mm	20-25
Dielectric Constant (50Hz)	DIN 53483		3.6
Dissipation Factor tanδ (50Hz)	DIN 53483		0.06
Surface Resistivity	IEC 60093	Ohm	>10 ¹⁵
Volume Resistivity	IEC 60093	Ohm.cm	>10 ¹⁵

Please note that the technical values given in the table are typical values for guidance and they are subjected to certain variability.

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Dimensions:

Thickness 3 - 6 mm, Dimension: 3050X2050 mm.

Thickness 8 - 35 mm, Dimension: 3050X2030 mm.

Thickness 40 - 60 mm, Dimension: 3000X2000 mm.

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

Colors:

Wide range of colors: opaques, translucents, opals, diffusers and LED. Special color matching available upon request.

Grades:

Plazcast Chemical-Resist - Enhanced chemical resistant for perfumery.

Plazcast Sanitary - Cast PMMA sheet with improved chemical resistance for sanitary applications and designed for easy and deep thermoforming.

Plazcast LED - A wide range of sheets for visual communication applications.

Plazcast Fluorescent - A wide range of impacting colors that looks like with their own light.

Plazcast UV-Block - Blocks most of the UV-light for applications as art protecting or windows.

Plazcast UV-Open - Transparent to UV light for solariums or greenhouses.

Plazcast Metal - Incorporates special pigments that give a metallic effect to the finished product.

Plazcast SMR - Is a Stainless-Steel Metal reinforced Cast PMMA panel specially designed for use in acoustic panels. Its patented retention system prevents falling off of debris in the event of a collision.

Plazcast Dual - A dark (black/grey) sheet during the day and bright sheet (white/red/green) during the night, or at the opposite: white during the day and colored at night (with backlight).

Plazcast Satin - Satin surface from one or two sides.

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 international standards, as customary in each country. Avoid exposure to excessive heat or aromatic cleaning solvent. Normal fire precautions should be taken to protect against combustion.

Plazit Polygal Group

info@plazit-polygal.com | Tel: +972.4.662.8888 | www.plazit-polygal.com

