

# PLAZCRYL EXTRUDED POLYMETHYL METHACRYLATE (PMMA) SOLID SHEETS

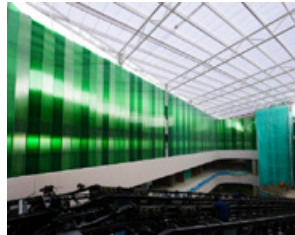
Bright clarity, excellent transparency and easy to thermoform. The PLAZCRYL sheets provide long-life UV resistant products for a broad range of applications.

Sheets are produced according to ISO 7823-2:2003 standard.

## APPLICATIONS



Glazing



Curtain walls and  
Interior decoration



Noise reduction  
barriers



Lighting, Illumination  
and signage



Sky light / Domes



Art design



POS display stands



Automotive

## MAIN ADVANTAGES

- Highly transparent, 92% light transmission
- Low haze <1%
- Half weight of glass
- Bright and hard surface
- Excellent color stability
- Proved weather resistance. Life-long UV-resistant.
- 10-year limited warranty
- Easily thermoformed, machined, polished and reshaped
- Easily glue bonded
- Cold curving capability
- No carcinogenic or hazardous substances
- Non-toxic fumes emitted in fire, fires can be easily extinguished with water
- Environment friendly-100% recyclable
- REACH and RoHS declarations

Typical Properties	Method	Units	Plazcryl (R7000)
<b>General</b>			
Density	ISO 1183	g/cm <sup>3</sup>	1.19
Water Absorption	ISO 62 (1)	%	0.3
Flammability (thickness dependent)	UL94		HB
Flammability (2-5 mm)	Euroclass EN13501		E
<b>Mechanical</b>			
Tensile Strength	ISO 527-2	MPa	72
Elongation at break	ISO 527-2	%	4
Tensile Modulus	ISO 527-2	MPa	3300
Flexural Strength	ISO 178	MPa	106
Flexural Modulus	ISO 178	MPa	3350
Compressive Strength	ISO 604	MPa	117
Rockwell Hardness	M scale		95
Impact Resistance (Charpy unnotched)	ISO 179/1fu	kJ/m <sup>2</sup>	15
Impact Resistance (Charpy notched)	ISO 179/1eA	kJ/m <sup>2</sup>	2
Impact Resistance (Izod notched)	ISO 180/1A	kJ/m <sup>2</sup>	1.5
<b>Optical</b>			
Refractive Index	ISO 489		1.49
Light Transmission (thickness dependent)	ASTM D1003	%	92
Haze (3mm transparent sheet)	ASTM D1003	%	< 1
<b>Thermal</b>			
Vicat Softening Temp.(50N)	ISO 306	°C	105
Heat Deflection Temp. (1.82 MPa)	ISO 75-1	°C	95
Coeff. of Linear Thermal Expansion (0-500C)	ISO 11359-2	µm/m°C	65
Thermal Conductivity	ASTM C177	W/mK	0.19
Maximum Continuous Service Temp.		°C	70
Maximum Short Time Service Temp.		°C	90
Minimum Temp.		°C	-40
<b>Electrical</b>			
Dielectric Constant (50Hz)	DIN 53483	kV/mm	20-25
Dissipation Factor tanδ (100Hz)	DIN 53483		3.7
Dissipation Factor tanδ (1MHz)	DIN 53483		0.04
Surface Resistivity	IEC 60093	Ohm	>10 <sup>14</sup>
Volume Resistivity	IEC 60093	Ohm.cm	>10 <sup>15</sup>

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

## DIMENSIONS

**Thickness** 0.70 – 30.0 mm

**Width** 1000, 1220, 1250 and 2050 mm

**Length** 600 – 6000 mm

All sheets are also available cut to size, according to customer requirements

**Colors** Transparent, white opaque, opal, diffusers, black, grey, green, brown, blue and red.

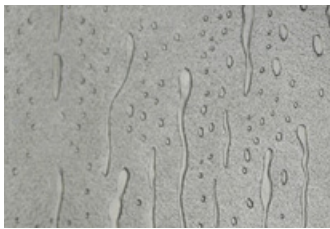
**Grades** Plazcryn UV Block – Blocks harmful UV light transmission from 380 nm

Plazcryn IR Solar – Blocks IR light transmission reducing the heat load across the sheet.

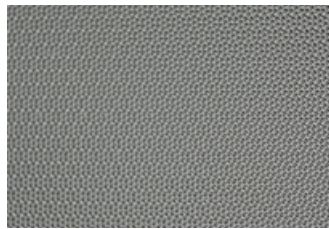
Plazcryn MRT - Plazcryn clear sheets specially designed for optical applications. Available from 0.5 to 2.0 mm thickness, limited to specific sizes.

## EMBOSSING PATTERNS

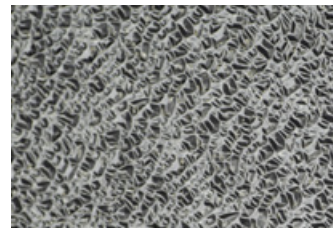
Monogal / Plazcarb sheets are available with different embossing patterns (limited to specific thicknesses and sizes)



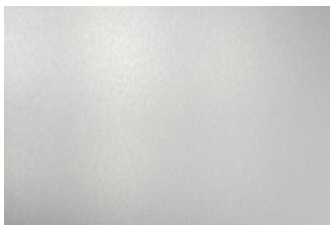
Aqua



Pinspot



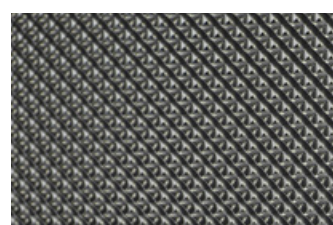
Cracked Ice



Non Reflective



G-Tech



K-12

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We reserve the right to make any changes, according to technological progress and further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods.

Product design using Monogal / Plazcarb sheets must be carried out only by qualified experts in the sole responsibility of the customer. Performance should be verified by testing, carried out only by qualified experts in the sole responsibility of the customer.