

**Plazit Polygal Group**  
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# Plazcryn Plazcast

Solid PMMA sheets

## About Plazit-Polygal

The Plazit Polygal Group is one of the leading international specialist manufacturers of thermoplastic sheets for various applications. Our company is respected worldwide for its innovative and high quality products and expert technical support. Our production facilities are located in Israel, USA, Chile, Bulgaria, Russia and Spain, enabling our clients to source our products close to their locations around the globe.

Both Plazit & Polygal started to manufacture extruded plastic sheets in 1973 – a landmark year for the international plastics industry. Polygal became few years later a pioneer in the production of polycarbonate multi wall sheets. From modest beginnings, both companies have grown and become world leaders in the plastic sheeting market.

Plazit and Polygal merged their operations in 2011, and the Plazit Polygal Group continues to develop its products, production facilities, human resources and market presence. We are committed to meeting the needs of our customers and guaranteeing high quality, flexibility and swift response – these commitments are the key to all our activities.

Plazit Polygal Group facilities are certified according to ISO 9001, ISO 14001, CSTB (France), HACCP, ROHS, fire and health certifications, and other international engineering standards. Our in-house experts provide technical support and continuous product development to meet the evolving needs of our global client base.

### CORPORATE

**Plazit 2001**  
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**Polygal Industries**  
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### SOUTH AMERICA

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### RUSSIA & CIS

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PMMA-En-0813-01 

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## High quality extruded and cast acrylic sheets

Bright clarity, excellent transparency and easy to thermoform, The PLAZCRYL PMMA extruded sheets provide long-life UV resistant products for visual communication, architectural and interior design purposes.

Also great for shopping center shelves, point-of-sale units for cosmetics, fashion and medical products, back-lit signage and other display purposes.

The PLAZCRYL Super (high impact PMMA) sheet is appropriate for vehicle number-plates, lighting and other applications where good mechanical properties are required.

## Applications

- Glazing
- Curtain walls
- Noise reduction barriers
- Lighting / Illumination
- Sky light / Domes
- Art design
- POS display stands
- Interior decoration
- Furniture
- Signage
- Automotive



PLAZCRYL



PLAZCAST

## Features and Benefits

- Highly transparent, 92% light transmission
- Low haze <1%
- Hard surface
- Excellent colour stability
- 10 year limited warranty
- Proved weather resistance
- Easily thermoformed and machined
- Easily glue bonded
- Cold curving capability
- Less half the weight of glass
- Recycle 100% after use
- No carcinogenic or hazardous substances
- REACH certification
- Food approved
- Friendly to the environment
- Non toxics fumes emitted in fire
- Fires can be easily extinguished with water
- Easily polished and reshape

## PLAZCRYL High Quality Extruded Acrylic Sheets

General Properties	Method	Units	Plazcryl XT			
			R7000	R7700	R7500	R7600
Density	ISO 1183	g/cm <sup>3</sup>	1.19	1.19	1.18	1.16
Water absorption	ISO 62 (1)	%	0.3	0.3	0.3	0.3
Flammability	UL-94 class	class	HB	HB	HB	HB
<b>Optical</b>						
Light transmission (clear sheet)	ASTM D1003	%	92	92	92	91
Haze (clear sheet)	ASTM D1002	%	<1	<1	<1	<1
Refractive index (clear sheet)	ISO 489		1.49	1.49	1.49	1.49
<b>Mechanical</b>						
Tensile Strength	ISO 527-2	MPa	72	57	50	40
Elongation at break	ISO 527-2	%	4	22	30	40
Tensile Modulus	ISO 527-2	MPa	3300	2450	2100	1700
Flexural Strength	ISO 178	MPa	106	88	79	62
Flexural Modulus	ISO 178	MPa	3350	2470	2100	1800
Rockwell hardness		M-scale	95	77	68	44
Impact resistance - Izod notched	ISO 180	kJ/m <sup>2</sup>	1.5	4	5	6.3
<b>Thermal</b>						
Temp. of deflection under load 1.8 Mpa	ISO 75-1	°C	95	92	90	83
Coefficient of linear thermal expansion (CLTE)	ISO 11359	mm/(m x 1/°C)	0.065	0.07	0.1	0.11
Vicat softening temperature (50 N)	ISO 306	°C	103	99	97	90
Recommended Continuous Service Temperature		°C	70	65	63	62
Recommended Maximum Temperature / Short time		°C	91	86	81	74

### DIMENSIONS

Thickness (mm): 0.7 to 30  
Widths (mm): 1000, 1250, 2050  
Length (mm): 500-6000

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

### EMBOSSING PATTERNS

### COLOURS

Transparent, White Opaque, Opal and Diffusers, Black Opaque, shades of Green, Brown, Grey, Blue & Red

### GRADES

PLAZCRYL Super - Hi Impact grades  
PLAZCRYL UV Block - blocks U.V. from 380nm  
PLAZCRYL IR Solar - blocks IR radiation  
PLAZCRYL Acoustic - noise reducing  
PLAZCRYL TOP (Thin Optical Sheets)  
ACRYLED - for LED illumination



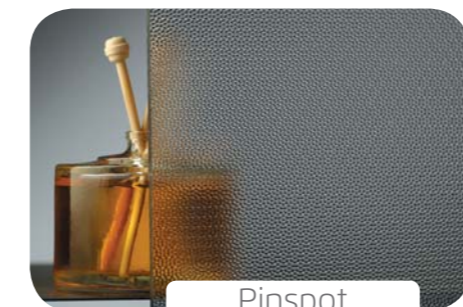
Aqua



Non Reflective



Cracked Ice



Pinspot

## PLAZCAST High Quality Cast Acrylic Sheets

General Properties	Method	Units	Value
Density	ISO 1183	g/cm <sup>3</sup>	1.2
Water absorption	ISO 62 (1)	%	0.3
Flammability	UL-94	class	HB
<b>Optical</b>			
Light transmission (clear sheet)	ASTM D1003	%	92
Haze (clear sheet)	ASTM D1002	%	<1
Refractive index (clear sheet)	ISO 489		1.49
<b>Mechanical</b>			
Tensile Strength	ISO 527-2	MPa	74
Elongation at break	ISO 527-2	%	5
Tensile Modulus	ISO 527-2	MPa	3280
Flexural Strength	ISO 178	MPa	114
Flexural Modulus	ISO 178	MPa	3350
Rockwell hardness		M-scale	100
Impact resistance - Izod notched	ISO 180	kJ/m <sup>2</sup>	1.5
<b>Thermal</b>			
Residual Shrinkage (internal stress)		%	<2
Temp. of deflection under load 1.8 Mpa	ISO 75-1	°C	105
Coefficient of linear thermal expansion (CLTE)	ISO 11359	mm/(m x 1/°C)	0.065
Vicat softening temperature (50 N)	ISO 306	°C	105-112
Recommended Continuous Service Temperature		°C	82
Recommended Forming Temperature		°C	140-190

### DIMENSIONS

Thickness (mm): 3 to 6:  
3050x2050 mm  
Thickness (mm): 8 to 25:  
3050x2030 mm  
Thickness (mm): 30 to 50:  
3000x2000 mm

### TYPES

Clear, Solvent Resistant, LED backlight, UV-transmitting, Satin & Bisatin, Colour Transparent, Colour Translucent, Opaque, Fluo & Soft fluorescent, Black & Night and Day & Night, Furniture Type, Nautical Type, Museum Type.

### SPECIALITIES

Metal, Iridescent, Bimetal, Engraved, Acoustic Walls. SMR (Stainless Metal Reinforcement).

