

MONOGAL / PLAZCARB

EXTRUDED POLYCARBONATE (PC) SHEETS

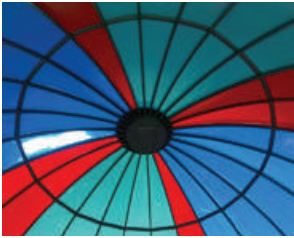
SOLID SHEETS 



MONOGAL / PLAZCARB EXTRUDED POLYCARBONATE (PC) SOLID SHEETS

Monogal / Plazcarb sheets are made from Polycarbonate, the transparent steel! Virtually unbreakable. Combine excellent transparency with outstanding toughness and heat resistance. Available with one or two sides UV protection, with excellent outdoor weathering performance. Meet the most demanding applications. Sheets are produced according to EN 16240:2013 standard.

APPLICATIONS



Glazing



Roofing and windows



Noise reduction
barriers



Lighting, Illumination
and signage



Sky light / Domes



Wind shields



Safety



Automotive

MAIN ADVANTAGES

- High clarity and light transmission: the transparent steel!
- Excellent impact strength
- Ductile - excellent toughness
- Excellent stiffness and strength
- Excellent dimensional stability - high heat resistance
- Lightweight. Half weight of glass
- Can be UV protected, excellent weathering and ageing resistance. Life-long UV-resistant
- 10-year limited warranty
- Easily handled, machined and thermoformed
- Cold curving capability
- No hazardous substances
- Excellent fire behavior: self-extinguish
- Environment friendly-100% recyclable
- REACH and RoHS declarations

Typical Properties	Method	Units	Plazcarb (R8000)
General			
Density	ISO 1183	g/cm ³	1.2
Water Absorption	ISO 62 (1)	%	0.15
Flammability (thickness dependent)	UL94		HB,V2
Flammability (2-5 mm)	Euroclass EN13501		B,s1,do
Mechanical			
Tensile Strength	ISO 527-2	MPa	60
Elongation at break	ISO 527-2	%	<100
Tensile Modulus	ISO 527-2	MPa	2300
Flexural Strength	ISO 178	MPa	90
Flexural Modulus	ISO 178	MPa	2300
Impact Resistance (Charpy unnotched)	ISO 179/1fu	kJ/m ²	NoBreak
Impact Resistance (Izod notched)	ISO 180/1A	kJ/m ²	>65
Optical			
Refractive Index	ISO 489		1.585
Light Transmission (thickness dependent)	ASTM D1003	%	81-90
Haze (3mm transparent sheet)	ASTM D1003	%	<1
Thermal			
Vicat Softening Temp.(50N)	ISO 306	°C	144
Heat Deflection Temp. (1.82 MPa)	ISO 75-1	°C	130
Coeff. of Linear Thermal Expansion (0-500C)	ISO 11359-2	µm/m°C	65
Thermal Conductivity	ASTM C177	W/mK	0.2
Maximum Continuous Service Temp.		°C	85
Maximum Short Time Service Temp.		°C	120
Short Time Service Temp.		°C	-40
Electrical			
Dielectric Constant (50Hz)	DIN 53483		3.0
Dissipation Factor tanδ (100Hz)	DIN 53483		0.0006
Dissipation Factor tanδ (1MHz)	DIN 53483		0.009
Surface Resistivity	IEC 60093	Ohm	>10 ¹⁴
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.

Dimensions

Thickness 0.5 – 19.0 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 and blue.

Grades:

Monogal / Plazcarb F - Fire retardant grade. V0 according to UL94 for specific thicknesses.

Monogal/ Plazcarb IR Solar - Blocks IR light transmission reducing the heat load across the sheet.

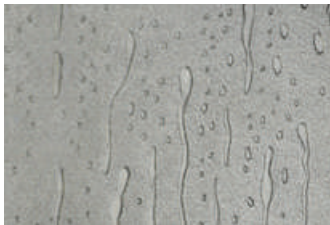
Monogal/ Plazcarb TOP - Clear sheets specially designed for optical applications. Available from 0.5 to 2.0 mm thickness, limited to specific sizes.

Monogal / Plazcarb FA - Special PC grade, non UV-protected or stabilized, produced from food contact approved raw materials.

Chairmat - Textured polycarbonate sheets specially designed for chair mats.

EMBOSSING PATTERNS

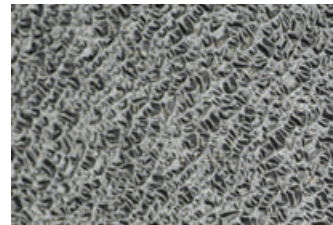
Monogal / Plazcarb sheets are available with different embossing patterns (limited to specific thicknesses and sizes)



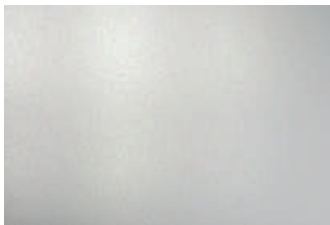
Aqua



Pinspot



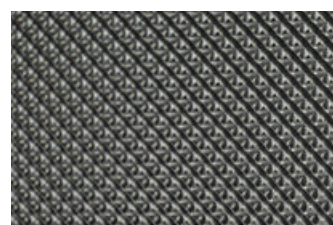
Cracked Ice



Non Reflective



G-Tech



K-12

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

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