

# PLAZCRYL SUPER

EXTRUDED HIGH IMPACT POLYMETHYL METHACRYLATE

SOLID SHEETS ===



# PLAZCRYL SUPER EXTRUDED HIGH IMPACT POLYMETHYL METHACRYLATE (PMMA) SOLID SHEETS

Bright clarity, excellent transparency and easy to thermoform. The PLAZCRYL SUPER sheets provide long-life UV resistant products for a broad range of applications. Especially where good mechanical properties are required.

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

### **APPLICATIONS**



Light domes



Glazing



**Partitions** 



P.O.P. / P.O.S.



Sign box



Canopies



Colored transparent sheets



Reinforced transparent sheets

#### MAIN ADVANTAGES

- Highly transparent, > 90% light transmission
- Low haze
- Half weight of glass.
- Good impact resistance several grades available.
- Excellent color stability
- Proved weather resistance. Life-long UV-resistant.
- 10-year limited warranty
- Excellent for thermoforming
- Easily 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	S25 (R7700)	S30 (R7400)	S50 (R7500)	S75 (R7800)	S100 (R7600)
General							
Density	ISO 1183	g/cm³	1.19	1.19	1.18	1.17	1.16
Water Absorption	ISO 62 (1)	%	0.3	0.3	0.3	0.3	0.3
Flammability	UL94		НВ	НВ	НВ	НВ	НВ
Mechanical							
Tensile Strength	ISO 527-2	MPa	57	54	50	45	40
Elongation at break	ISO 527-2	%	22	26	30	35	40
Tensile Modulus	ISO 527-2	MPa	2450	2275	2100	1900	1700
Flexural Strength	ISO 178	MPa	88	84	79	71	62
Flexural Modulus	ISO 178	MPa	2470	2285	2100	1950	1800
Rockwell Hardness	M scale		77	73	68	56	44
Impact Resistance (Charpy unnotched)	ISO 179/1fu	kJ/m²	51	59	67	71.5	76
Impact Resistance (Charpy notched)	ISO 179/1eA	kJ/m²	4.3	5.3	6.2	6.9	7.6
Impact Resistance (Izod notched)	ISO 180/1A	kJ/m²	4	4.5	5	5.6	6.3
Optical							
Refractive Index	ISO 489	1.49	1.49	1.49	1.49	1.49	1.49
Light Transmission (3mm transparent sheet)	ASTM D1003	92	92	91.5	91	91	92
Haze (3mm transparent sheet)	ASTM D1003	< 1	< 1	< 1	< 1	< 1	< 1
Thermal							
Vicat Softening Temp.(50N)	ISO 306	°C	99	98	97	94	90
Heat Deflection Temp. (1.82 MPa)	ISO 75-1	°C	92	91	90	85	83
Coeff. of Linear Thermal Expansion (0-500C)	ISO 11359-2	μm/m°C	70	80	100	105	110
Maximum Continuous Service Temp.		°C	65	63	63	62	62
Maximum Short Time Service Temp.		°C	86	83	81	76	74
Minimum Temp.		°C	-20	-20	-20	-20	-20

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 – 20.0 mm

Width 1000, 1220 and 2050 mm

**Length** 600 – 6000 mm

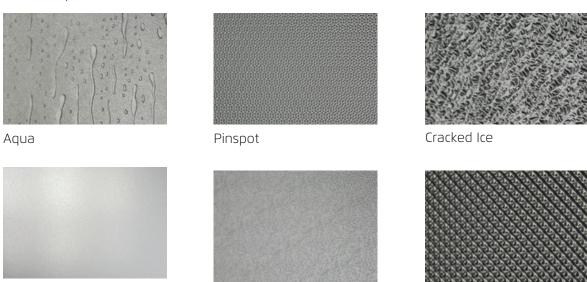
All sheets are also available cut to size, according to customer requirements

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

**Grades** Several grades with different impact resistance are available. See typical properties table.

#### **EMBOSSING PATTERNS**

Plazcryl Super sheets are available with different embossing patterns (limited to specific thicknesses and sizes)



G-Tech

All information, recommendations or technical advice given in this technical sheet, is given in good faith, to the best of our knowledge and based on our present experience and procedures. However, no liability or other legal responsibility is assumed for the full adequacy, accuracy or completeness of this information.

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

Product design using Plazcryl Super 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.

Non Reflective