

ACRILICO COLATO CRYLUX[®]



1. PRODUCT IDENTIFICATION

CRYLUX[®] is the brand name for cast Polymethyl methacrylate sheets from POLYCASA.

The composition of the final product is 90-95% PMMA + additives (stabilisers, plasticizers, dyes and pigments, release agents).

CRYLUX[®] possibilities, characteristics and extraordinary range of colours cover all needs in construction, industry, decoration, lighting & publicity.

CRYLUX[®] sheets are produced and tested according to UNE EN ISO 7823-1.

2. CHARACTERISTICS

CRYLUX[®] most outstanding properties are its optical transparency (93% light transmission for colourless sheets), its high impact resistance and lightness compared to glass.

CRYLUX[®] is resistant to UV rays, shows good thermal stability, low water absorption and good chemical resistance. It has the best abrasion resistance in our thermoplastic's product range.

CRYLUX[®] sheets are easy to handle and most fabricating and moulding techniques are applicable to it, allowing attractive designs.

3. APPLICATIONS

■ Construction

- Skylights
- Vaults
- Glasswork
- Partition
- Doors
- Handrails
- Window sills
- Diffusing skylights
- Enclosures

■ Industry

- Signs / Publicity
- Security
- Furniture
- Sanitary furnishing
- Gift articles
- Industrial pieces
- Solariums
- Nautical
- Projection screens

4. FABRICATION AND FINISHING TECHNIQUES

CRYLUX[®] sheets are easy to handle.

Sawing, drilling, gluing, printing, milling, mechanical polishing, vacuum forming, hot bending do not offer any problems to the CRYLUX[®] range.

More detailed information on these items can be found in our "USER GUIDE".

5. TECHNICAL DATA

GENERAL			
Property	Method	Units	CRYLUX [®]
Density	ISO 1183	g/cm ³	1.19
Water absorption	ISO 62, Method A	%	0.2
Rockwell Hardness	ISO 2039-2	M scale	100
	ISO 2039-2	M scale	105
MECHANICAL			
Property	Method	Units	CRYLUX [®]
Tensile Strength	ISO 527	MPa	75
Elongation	ISO 527	%	6
Tensile Modulus	ISO 527	MPa	3400
Flexural Strength	ISO 178	MPa	120
Flexural Modulus	ISO 178	MPa	3200
Charpy (unnotched)	ISO 179	kJ/m ²	17
Charpy (notched)	ISO 179	kJ/m ²	2
THERMAL			
Property	Method	Units	CRYLUX [®]
Vicat Temp. (VST/B 50)	ISO 306	°C	110
Specific Heat Capacity	ISO 3146-C-60°C	J/g.K	2.16
Linear thermal expansion	ISO 11359-2	mm/m°C	0.07
Thermal conductivity	DIN 52612	W/m.K	0.19
Max. service temperature continuous use		°C	80
Max service temperature short term use		°C	90
Degradation temperature		°C	>280
OPTICAL			
Property	Method	Units	CRYLUX [®]
Light transmission)	EN 13468-2	%	92
Refractive index	ISO 489	n _D ²⁰	1.492
ELECTRICAL			
Property	Method	Units	CRYLUX [®]
Surface resistivity	IEC 60093	Ω	10 ¹⁴
Volume resistivity	IEC 60093	Ω x m	10 ¹⁵
Electrical strength	IEC 60243-1	kV/mm	10
Dielectric strength	DIN EN 60243-1	kV/mm	30
Dielectrical dissipation factor 50 Hz	DIN 53483-2		0.06
Dielectrical dissipation factor 1 KHz	DIN 53483-2		0.04
Dielectrical dissipation factor 1 MHz	DIN 53483-2		0.02
Relative permittivity 50 Hz	DIN 53483-2		2.7
Relative permittivity 1 KHz	DIN 53483-2		3.1
Relative permittivity 1MHz	DIN 53483-2		2.7

Note: These technical data of our products are typical ones; the actually measured values are subject to production variations.