

POLYCASA CAST UVP

1. PRODUCT IDENTIFICATION

POLYCASA CAST UVP is a polymethylmethacrylate cast sheet specially designed to have a better UV protection than standard PMMA cast material.

2. CHARACTERISTICS

POLYCASA CAST UVP (extra ultra violet protection) is highly protected against UV radiation.

Compared to standard POLYCASA CAST, POLYCASA CAST UVP has higher protection against UVA light. This UVA light is the lowest energetic radiation within UV range but it can cause damage and deterioration of several pigments and inks. UV light is present in solar radiation but also in indoor lighting in a short extend. Therefore, it is the optimal material for paints and pictures glazing.

Not only does POLYCASA CAST UVP show higher absorption, but this effect is longer lasting than for the standard material. This higher protection prevents polymer degradation increasing lifetime of the sheet. It would be the optimal material for outdoor applications where high ageing resistance is required.

3. APPLICATIONS

- Pictures, paints glazing
- Galleries
- Glazing in zones with high solar radiation
- Boats glazing

4. FABRICATING AND FINISHING TECHNIQUES

POLYCASA CAST UVP can be worked in the same conditions as standard material. It can be laser cut, flame polished, drilled, milled, etc... following the same procedures as for POLYCASA CAST.

To avoid damage during transport and handling, they are supplied protected with PE film on both surfaces.

For general information about handling POLYCASA CAST, please refer to the "USER GUIDE", available on request.

POLYCASA CAST UVP

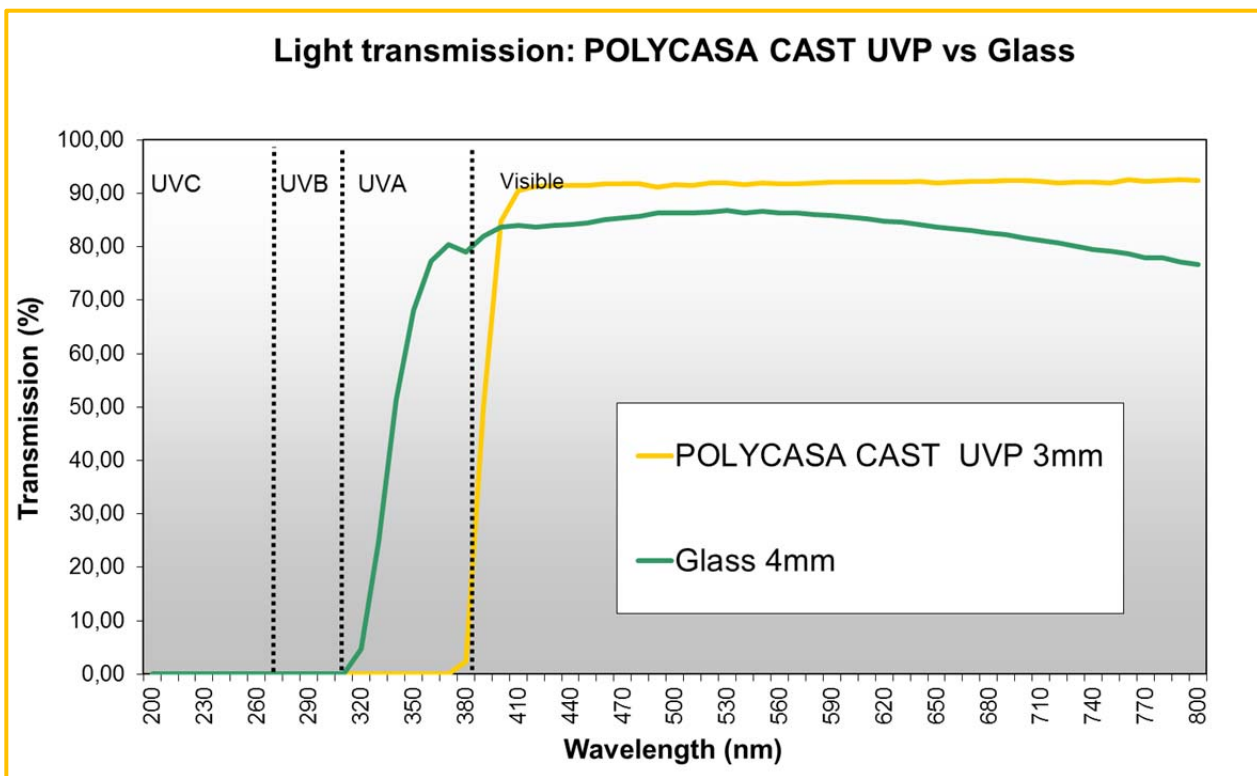
5. TECHNICAL INFORMATION

GENERAL			
Property	Method	Units	POLYCASA CAST UVP
Density	ISO 1183	g/cm ³	1.19
Water absorption	ISO 62, Method A	%	0.2
Rockwell Hardness	ISO 2039-2	M scale	100
MECHANICAL			
Property	Method	Units	POLYCASA CAST UVP
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	POLYCASA CAST UVP
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	POLYCASA CAST UVP
Light transmission)	EN 13468-2	%	92
Refractive index	ISO 489	n ^D ₂₀	1.492
ELECTRICAL			
Property	Method	Units	POLYCASA CAST UVP
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

POLYCASA CAST UVP

6. LIGHT TRANSMISSION



NOTE:

Our technical recommendations are without legal obligation. The information given in this brochure is based on our knowledge and experience to date. It does not release the user from the obligation of carrying out their own tests and trials, in view of the many factors that may affect processing and application; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed. Technical data of our products are typical ones; the actually measured values are subject to production variations