

POLYCASA® XT

Polymethyl Methacrylate Acrylic

Polycasa

Message:

XT is one of the trade names of Polycasa for extruded acrylic (polymethylmethacrylate PMMA) in the form of large dimensional sheets. Offering solutions to both indoor and outdoor applications, Polycasa XT is available in clear and opal white standard, and in a wide range of colours and designs.

Sheets are produced and tested according to DIN EN ISO 7823-2.

CHARACTERISTICS

Good optical properties — brilliant transparency showing excellent colour.

High-quality surfaces — very good weathering and ageing resistance.

Can be used in contact with foodstuffs — meets all current European food control legislation.

Does not contain any toxic materials or heavy metals which may cause environmental damage or health risks.

Easy to recycle.

High impact grades Polycasa XT610, XT620 and XT630 have outstanding mechanical properties and excellent impact strength.

APPLICATIONS

Construction components: light domes, partition walls, glazing, roofing, caravan windows.

Lighting: prismatic control lenses, opal diffusers.

Engineering components: housings, machine covers.

Advertising and decoration: letters, shop fittings, panels, Point Of Purchase displays.

Other applications: containers, lettering templates, solariums UVT (UV-transmitting grade).

General Information	
Features	Food Contact Acceptable
	Good Surface Finish
	Good Weather Resistance
	Non-Toxic
	Opticals
	Recyclable Material
Uses	Building Materials
	Construction Applications
	Displays
	Fittings
	Glazing
	Housings
	Lenses
	Lighting Diffusers
	Protective Coverings
	Wall Panels
	Windows & Doors
Agency Ratings	EN 7823
Appearance	Clear/Transparent
	Colors Available

Glossy Finish

Opaque

White

Forms	Sheet		
Physical	Nominal Value	Unit	Test Method
Density	1.19	g/cm ³	ISO 1183
Molding Shrinkage	0.50 to 0.80	%	
Water Absorption ¹ (23°C, 24 hr)	0.20	%	ISO 62
Hardness	Nominal Value	Unit	Test Method
Ball Indentation Hardness	235	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3200	MPa	ISO 527-2
Tensile Stress	70.0	MPa	ISO 527-2
Tensile Strain (Break)	4.0	%	ISO 527-2
Flexural Modulus	3300	MPa	ISO 178
Flexural Stress	115	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	2.0	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	17	kJ/m ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature ²	105	°C	ISO 306/B50
CLTE - Flow	7.0E-5	cm/cm/°C	DIN 53752
Specific Heat	1470	J/kg/°C	ISO 11357
Thermal Conductivity	0.18	W/m/K	DIN 52612
Maximum Service Temperature			
continuous use	70	°C	
short term use	90	°C	
Refractive Index	1.4920		ISO 489
Degradation Temperature	> 280	°C	
Forming Temperature			
air pressure	140 to 160	°C	
vacuum	160 to 190	°C	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	3.0E+15 to 3.0E+16	ohms	IEC 60093
Volume Resistivity	1.0E+15 to 5.0E+15	ohms · cm	IEC 60093
Dielectric Strength			
--	30	kV/mm	IEC 60243
--	10	kV/mm	IEC 60243-1
Relative Permittivity			DIN 53483
50 Hz	2.70		
1 kHz	3.10		

1 MHz	2.70		
Dissipation Factor			DIN 53483
50 Hz	0.060		
1 kHz	0.040		
1 MHz	0.020		
Optical	Nominal Value	Unit	Test Method
Transmittance (3000 μm)	92.0	%	ISO 13468-1
NOTE			
1.	50x50x4mm ³ (Method 1)		
2.	Pre treatment 16h at 80°C		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material


Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT