

## Polycasa XT 610 PMMA

Category : Polymer , Thermoplastic , Acrylic (PMMA)

### Material Notes:

QUINN XT sheets have good optical properties and a brilliant surface. QUINN XT sheets offer excellent transparency, good mechanical properties, are UV resistant, have very good weathering and ageing resistance and remain color constant for years. High impact grades, QUINN XT610, XT620, XT630, have outstanding mechanical properties and excellent impact strength. Both QUINN XT sheets and all high impact grades can be used in contact with foodstuffs, as they meet all current European food control legislation. QUINN XT sheets and the high impact grades do not contain any toxic materials or heavy metals, which may cause environmental damage or health risks. It is insoluble in water, and not subject to hazardous materials identification. QUINN XT sheets and the high impact grades are easy to recycle. Construction Components Light domes Partition walls Door Glazing Roofing Skylights for caravans Lighting Lighting control lenses Domestic light fittings Engineering Components Machine housings, machine safety covers Advertising and Signage Molded letters Store displays Shop fittings Illuminated graphics panels Other Applications Containers Lettering Templates Solariums Sound Barrier Walls Quinn Manufacturing Group rebranded its Plastics Division as Polycasa in 2013.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Polycasa-XT-610-PMMA.php](http://www.lookpolymers.com/polymer_Polycasa-XT-610-PMMA.php)

Physical Properties	Metric	English	Comments
Density	1.15 g/cc	0.0415 lb/in <sup>3</sup>	ISO 1183
Water Absorption	0.30 %	0.30 %	24h/23°C - 50x50x4mm; DIN 53495 Method 1
Linear Mold Shrinkage	0.0060 - 0.0090 cm/cm	0.0060 - 0.0090 in/in	

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	100 MPa	14500 psi	ISO 2039-1
Tensile Strength at Break	40.0 MPa	5800 psi	ISO 527-2
Elongation at Break	35 %	35 %	ISO 527-2
Tensile Modulus	1.80 GPa	261 ksi	ISO 527-2
Flexural Strength	65.0 MPa	9430 psi	ISO 178
Flexural Modulus	1.80 GPa	261 ksi	ISO 178
Charpy Impact Unnotched	6.00 J/cm <sup>2</sup>	28.6 ft-lb/in <sup>2</sup>	ISO 179-1
Charpy Impact, Notched	0.500 J/cm <sup>2</sup>	2.38 ft-lb/in <sup>2</sup>	ISO 179-1

Thermal Properties	Metric	English	Comments
CTE, linear	110 µm/m-°C	61.1 µin/in-°F	DIN 53752

Thermal Properties	@Temperature 20.0 °C Metric	@Temperature 68.0 °F English	Comments
Specific Heat Capacity	1.50 J/g-°C	0.359 BTU/lb-°F	IEC 1006
Thermal Conductivity	0.180 W/m-K	1.25 BTU-in/hr-ft <sup>2</sup> -°F	DIN 52612
Maximum Service Temperature, Air	65.0 °C	149 °F	Continuous Use
	75.0 °C	167 °F	Short Term Use
Vicat Softening Point	98.0 °C	208 °F	ISO 306
Decomposition Temperature	>= 280 °C	>= 536 °F	

Optical Properties	Metric	English	Comments
Refractive Index	1.492	1.492	DIN 5036-3
Transmission, Visible	90 %	90 %	DIN 5036-3
	@Thickness 3.00 mm	@Thickness 0.118 in	

Electrical Properties	Metric	English	Comments
Dielectric Constant	2.9	2.9	
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dielectric Strength	30.0 kV/mm	762 kV/in	DIN 53481
Dissipation Factor	0.030	0.030	DIN 53483-2
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	

Descriptive Properties	Value	Comments
Forming Temperature, Air Pressure, °C	130-150	
Forming Temperature, Vacuum, °C	140-170	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China