

Physical properties PMMA XT fluor

General properties	Test method	Unit	Value
Density	ISO 1183 DIN 53479 ASTM D 792	g/cm ³	1.19
Water absorption at saturation (23°C / 50% r.h.)	ISO 62	%	0.20
Mechanical properties			
Tensile Stress at Break [sB] (+23°C)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	83
Tensile Strain at Break [eB] (+23°C)	ISO 527-1/-2 DIN 53455 ASTM D 638	%	4.5
Tensile Modulus [E] (+23°C)	ISO 527-1/-2 DIN53457 ASTM D 638	MPa (N/mm ²)	3200
max. compression stress (continuous)		MPa (N/mm ²)	20
Flexural Strength	ISO 178 ASTM D 790	MPa (N/mm ²)	105
Charpy Impact Strength (+23°C)	ISO 179 DIN 53453	kJ/m ²	15
Charpy Notched Impact Strength (+23°C)	ISO 179 DIN 53453	kJ/m ²	1.6
Thermal properties			
max. service temperature (long time)	-	°C	80
max. service temperature (short time)	-	°C	90
Heat Deflection Temperature [HDT/A]	ISO 75-1/-2 DIN 53461 ASTM D 1525	°C	105
Vicat Softening Point	ISO 306 DIN 53460 ASTM D 1525	°C	110
	DIN 52612	W/(mxK)	0.19
heat capacity	-	J/(gxK)	2.16 (60°)
Electrical properties	Test method	Unit	Value
min. service temperature (long time)	-	°C	-40
max. service temperature (long time)	-	°C	70
max. service temperature (short time)	-	°C	95
Coeff. Of Thermal Expansion (23 – 60°C)	ISO 11359	10 ⁻⁶ /K	80
	DIN 52612	W/(mxK)	0.19
Combustibility properties			
Flammability acc. To UL94	IEC 60695-11-10	Class	HB
Fire behavior	DIN 4102	Klasse	B2

This table is a valuable help in the choice of a material. The data listed here fall within the normal range of products properties, but they should not be used to establish material specification limits nor used alone as the basis of design.