

TECHNICAL DATA SHEET
PMMA XT (EN)
MATERIAL

PMMA

MODIFICATION

extruded

COLOUR

clear

Property	Unit	Test method	Reference value
General and optical properties			
Density	g/cm ³	ISO 1183	1.19
Moulding shrinkage	%	ISO 2039-2	0.5 - 0.8
Water absorption, 24 h/23 °C	%	ISO 62-1	0.2
Light transmission (3 mm)	%	ISO 13468-2	92
Refractive index		ISO 489	1.492
Food contact - GHP		EU 10/2011	no cytotoxic
Haze	%	ISO 14782	<1
Total solar energy transmission, g value (3 mm)	%	EN 410	86
Gloss value	%	DIN 67530	>100
Mechanical properties			
Tensile strength	MPa	ISO 527-2	70
Elongation at break	%	ISO 527-2	4
Tensile modulus	MPa	ISO 527-2	3100
Flexural strength	MPa	ISO 178	110
Flexural modulus	MPa	ISO 178	3000
Impact strength Charpy, unnotched	kJ/m ²	ISO 179-1/1eU	15
Impact strength Charpy, notched	kJ/m ²	ISO 179-1/1eA	2
Ball indentation hardness	MPa	ISO 2039-1	235
Thermal properties			
Vicat temperature (B 50)	°C	ISO 306	105
Heat deflection temperature (A)	°C	ISO 75-2	95/100
Linear thermal expansion α	mm/(m·°C)	ISO 11359-2	0.07
Thermal conductivity	W/(m·K)	ISO 22007-1	0.18
Service temperature, continuous use	°C		70
Maximum temperature, short-term use	°C		90
Degradation temperature	°C		>280
Specific heat capacity	J/(g·K)	ISO 11357-4	1.47
Forming temperature - air pressure	°C		140 - 160
Forming temperature - vacuum	°C		160 - 190
Fire resistance	class	EN 13501-1	E - no burning droplets
Fire resistance	class	UL 94	HB
Electrical properties			
Surface resistivity	Ω	IEC 62631-3-2	>10¹⁵
Volume resistivity	Ω·m	IEC 62631-3-1	>10¹³
Electrical strength	kV/mm	IEC 60243-1	10
Dielectric strength	kV/mm	IEC 60243-1	30
Dielectric dissipation factor, 1 MHz		IEC 60250	0.02
Relative permittivity, 1 MHz		IEC 60250	2.7

NOTES ON USE

These technical data are typical reference values; actual measured values are subject to production-related variations.