

TUCRYL - PMMA XT MIRROR

GENERAL			
Property	Method	Units	PMMA-XT-MIRROR
Density	ISO 1183	g/cm ³	1.19
Water absorption 24h/23°C-50x50x4mm3	DIN EN ISO 62 Method 1	%	0.2
Ball indentation hardness	ISO 2039-1	MPa	235
Forming temperature - air pressure		°C	140-160
Forming temperature - vacuum		°C	160-190
Moulding shrinkage		%	0.5-0.8
MECHANICAL			
Property	Method	Units	PMMA-XT-MIRROR
Tensile strength	ISO 527-2	MPa	70
Elongation at break	ISO 527-2	%	4
Tensile modulus	ISO 527-2	MPa	3200
Flexural strength	ISO 178	MPa	115
Flexural modulus	ISO 178	MPa	3300
Impact strength - Charpy unnotched	ISO 179-1	KJ/m ²	17
Impact strength - Charpy notched	ISO 179-1	KJ/m ²	2
THERMAL			
Property	Method	Units	PMMA-XT-MIRROR
Vicat temperature (B 50)*	ISO 306	°C	105
Specific heat capacity	ISO 11357-4	J/gK	1.47
Linear thermal expansion	DIN 53752	K ⁻¹ ×10 ⁻⁵	7
Thermal conductivity	DIN 52612	W/mK	0.18
Service temperature continuous use		°C	70
Max. temperature short term use		°C	90
Degradation temperature		°C	>280
OPTICAL			
Property	Method	Units	PMMA-XT-MIRROR
Light transmission (3mm)	DIN 5036-3/ EN ISO 13468-2	%	92
Refractive index	ISO 489	n _{D20}	1.492
ELECTRICAL			
Property	Method	Units	PMMA-XT-MIRROR
Surface resistivity	IEC 60093	Ω	3×10 ¹⁵ 3×10 ¹⁶
Volume resistivity	IEC 60093	Ω x m	1×10 ¹³ 5×10 ¹³
Electrical strength	IEC 60243-1	KV/mm	10
Dielectric strength	IEC 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 1 MHz	DIN 53483-2		2.7

*Pre treatment 16h at 80°C

Note: The technical data of our products are typical ones; the actually measured values are subject to production variations.