Cast Acrylic sheet – Stock Shapes

Chemical designation

PMMA

Colour

Density

1.2 g/cm^3

Fillers

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Mechanical properties	***parameter***	***value***	***unit***	***norm***	***comment***
Modulus of elasticity (tensile test)		3000 – 3400	Mpa	ISO 527	
Tensile strength		72	Mpa	ISO 527	
Elongation at break		4 - 6	%	ISO 527	
Flexural strength		125	Mpa	ISO 178	
Compression strength		120	Mpa	ISO 604	
Impact strength		12 - 15	kJ/m^2	ISO 179-1	

Thermal properties	***parameter***	***value***	***unit***	***norm***	***comment***
Heat Stability – Vicat B		110	°C	ISO 306	
Forming Temperature		130-190	°C		
Service Temperature (MAX)		80	°C		
Thermal expansion (CLTE)		0.07	M/mm °C	ISO 11359-2	
Specific heat		1.47	KJ/kg °C	ISO 11357-4	
Thermal conductivity		0.19	W/m °C	DIN 52612	

Electrical properties	***parameter***	***value***	***unit***	***norm***	***comment***
Dielectric strength		20-25	kV/mm	DIN 53481	
Volume Resistivity		10^{15}	Ω*cm	DIN 53482	

Other properties	***parameter***	***value***	***unit***	***norm***	***comment***
Water Absorption	24h	0.30	%	ISO 62	

Our information and statements reflect the current state of our knowledge and shall inform about our products and their applications. They do not assure or guarantee chemical resistance, quality of products and their merchantability in a legally binding way. Our products are not defined for use in medical or dental implants. Existing commercial patents have to be observed. The corresponding values and information are no minimum or maximum values, but guideline values that can be used primarily for comparison purposes for material selection. These values are within the normal tolerance range of product properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes.

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