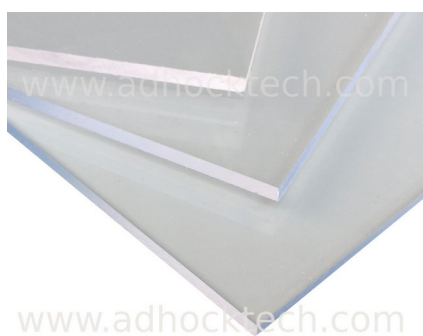


Polymethylmethacrylate (PMMA)

The Polymethylmethacrylate is a plastic material formed by the polymer of methyl methacrylate. Defined in the common language methacrylate, normally is very transparent, most of the glass, to the point that possesses characteristics of behavior similar to the optical fiber for qualities of transparency, with properties and shatterproof depending on the blend. PMMA is hydrophobic. It also has a high degree of biocompatibility with human tissue and is therefore used for various medical uses and paramedics. The PMMA is a material sensitive to the current flowing through it and therefore is also used in the microelectronics industry. Technical details:

Raw material polymethyl methacrylate (PMMA); Specific gravity: 1.19



MECHANICAL PROPERTIES

Temperature of use	Density	Yield Stress	Breakdown Voltage	Modulus of elasticity (tension)	Modulus of elasticity (tension)	Modulus of elasticity (bending)	Hardness Test	Breaking Strength	Resistance Elongation	Wear Creep
C°	g/cm³	Mpa	Mpa	%	MPa	MPa	MPa	MPa	μ/km	
85	1,19	120	70	4	3200				4	11

THERMAL PROPERTIES

Melting Temperature	Glass Transition Temperature	Hot Dimensional Stability (met. A)	Hot Dimensional Stability (met. B)	Use Temperature Limit	Thermal Conductivity	Heat Capacity	Coefficient of Thermal Expansion
C°	C°	C°	C°	C°	W/K.m	J/K.m	10 1/K
				85	0,19	1,47	7

ELECTRICAL PROPERTIES

Constant Dielectric	Dielectric Loss Factor	Specific Bulk Resistivity	Surface Resistivity	Rigidity Dielectric	Resistance to Leakage Current
abs	Tan δ	Ω.cm	Ω	kV/mm	class
3	0,006	10	10 ¹⁶	30	

VARIOUS PROPERTIES

Moisture Absorption	Water Absorption until Saturation	Specific Bulk Resistivity
%	%	