

PMMA

- Temperature print: 250-280 °C for 2,90 mm filament / 220-250 °C for 1,75 mm filament
- Temperature pad is 50 °C

Material data sheet for PMMA:

		CONDITIONS	TEST METHOD	UNITS	
1 - GENERAL PROPERTIES					
Density			ISO 1183	g/cm ³	1,19
Water Absorption		23°C/50%HR	ISO 62	%	0,3
Mold Shrinkage			ASTM D-955	%	0,2-0,6
2 - RHEOLOGICAL PROPERTIES					
Rheology					
Melt Flow Index		230°C/3,8 kg	ISO 1133	g/10 min	2,8
Process					
Melt Temperature	mini			°C	230
	maxi				250
Mold Temperature	mini			°C	80
	maxi				90
Drying Conditions	time			h	2-4
	temperature			°C	85-90
3 - MECHANICAL PROPERTIES					
Rockwell Hardness			ASTM D-785		M-97
Tensile Strength		23°C	ISO 527-2	MPa	70
Elongation at break		23°C	ISO 527-2	%	6
Flexural Modulus		23°C	ISO 178	MPa	3300
Flexural Strength		23°C	ISO 178	MPa	103
Compressive Strength		23°C	ISO 604	MPa	117
Impact Resistance (Charpy, Notched)		23°C	ISO 179-2C	kJ/m ²	2
Impact Resistance (Charpy, Unnotched)		23°C	ISO 179-2D	kJ/m ²	11
Impact Resistance (Izod, Notched)		23°C	ISO 180/1a	kJ/m ²	1,8
4 - OPTICAL PROPERTIES					
Refractive Index B			ISO R-489		1,49
Light Transmittance			ASTM D-1003	%	92
Haze			ASTM D-1003	%	0,5
5 - ELECTRICAL PROPERTIES					
Dielectric Strength			ASTM D-149	MV/m	19,7
Dielectric Constant		60 Hz	ASTM D-150		3,7
Dissipation Factor		1 MHz	ASTM D-150		0,04
Surface Resistivity			ASTM D-257	Ohm	>10 ¹⁴
Volume Resistivity			ASTM D-257	Ohm.cm	>10 ¹⁵
6 - THERMAL PROPERTIES					
Vicat Softening Temperature		50 N	ISO 306	°C	108
HDT		1,82 MPa	ISO 75-2	°C	100
		0,45 MPa			103
Coefficient of linear expansion		[-30°C;23°C]	ASTM D-696	10 ⁻⁶ K	65
Specific Heat				J/(kg.°C)	2093
7 - FLAMMABILITY					
Fire Resistance			ASTM UL/94	Class	HB

N.B.: The values quoted are the average of results obtained under laboratory conditions and are given only as an indication to enable customers to make best use of our products. Values reported are typical and should not be used for specification purposes.