

DATASHEET

MATERIAL

PMMA

TECHNICAL DETAILS

Density	ISO 1183	g/cm ³	1.18
Water absorption	DIN 53495	%	0.30
Chemical resistance			
Continuous use temperature		°C	75-90
Yield tensile strength	ISO 527	Mpa	70
Yield strain	ISO 527		
Ultimate tensile strength	ISO 527	Mpa	72
Ultimate tensile strain	ISO 527	%	5
Impact toughness	ISO 179	kJ/m ²	15
Notch impact toughness	ISO 179	kJ/m ²	1.5
Rockwell method ball pressure hardness	ISO 2039-1	Mpa	185
Shore D hardness	DIN 53505		90
Bending strength	ISO 178	Mpa	1256
Elasticity modulus	ISO 527	Mpa	3300
Vicat softening temperature	ISO 306	°C	100
HDT	ISO 75	°C	95
Thermal expansion coefficient			
Thermal conductivity 20	DIN 52612	w/(mxk)	0.19
Volume resistance	VD 0303	≥	10 ¹⁵
Surface resistance	VDE 0303	≥	10 ¹⁵
Dielectric constant 1MHz	DIN 53483		2.9
Dielectric dissipation factor 1MHz	DIN 53483		0.03
Dielectric strength	VDE 0303	kv/mm	30
Strength of leakage current	DIN 53480		
Adhesion			
Innocuous	EEC90/180		+
Friction coefficient	DIN 537375		0.55
Combustibility	UL94	HB	
UV resistance			
Acid-resistance			+
Alkali resistance			+
Carbonic acid water resistance			+
Chloro-carbonic acid resistance (CKW)			0
Resistant to aromatic compounds			-
Ketone resistance			-
Hot water resistance			0