

Cast Acrylic

Electrical Properties

Property	Test Method	Units	Value
Dielectric Constant 50Hz	DIN 53483		3.6
Volume Resistivity	DIN 53482	$\Omega \cdot \text{cm}$	10^{15}
Surface Resistivity	DIN 53482	Ω	10^{14}
Dielectric Strength	DIN 53481	kV/mm	30
Dissipation Factor (50Hz)	DIN 53483		0.06

Impact Strengths

Property	Test Method	Units	Value
Izod (notched)	ISO 180	Kj/m ²	-
Charpy (notched)	ISO 179	Kj/m ²	2
Charpy (unnotched)	ISO 179	Kj/m ²	15

Mechanical Properties

Property	Test Method	Units	Value
Flexural Modulus	ISO 178	MPa	3000
Flexural Strength	ISO 178	MPa	125
Tensile Modulus	ISO 527	MPa	3300
Tensile Strength	ISO 527	MPa	75
Elongation	ISO 527	%	6

Optical Properties

Property	Test Method	Units	Value
Light Transmission	ISO 13468-1	M scale	93
Refractive Index	ISO 489	nD 20	1.492

Physical Properties

Property	Test Method	Units	Value
Density	ISO 1183	g/cm ³	1.19
Rockwell hardness	ISO 2039-2	M Scale	105

Thermal Properties

Property	Test Method	Units	Value
Vicat Temperature (VST/A 50)	ISO 306	°C	115
Heat Deflection Temp (A)	ISO 75	°C	105
Specific Heat Capacity	ISO 3146-C-60 °C	J/g.K	2.16
Coefficient of Linear Thermal Expansion	ISO 11359-2	K-1 x 10-5	7
Thermal Conductivity	DIN 52612	W/m.K	0.19
Degradation Temperature		°C	>280
Max Service Temperature Continuous Use		°C	80
Max Service Temperature Short Term Use		°C	90
Sheet Forming Temp Range		°C	160-190

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