

Cast Acrylic Sheet - Technical Data Sheet



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GENERAL			
Property	Method	Units	Value
Density	ISO 1183	g/cm ³	1.19
Rockwell Hardness	ISO 2039-2	M-scale	105

OPTICAL			
Property	Method	Units	Value
Light Transmission	ISO 13468-1	%	93
Refractive Index	ISO 489	n ^D ₂₀	1.492

MECHANICAL			
Property	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

Coefficient of linear thermal expansion			
Property	Method	Units	Value
Vicat Temp (VST/A 50)	ISO 306	°C	115
Heat Deflection Temp. (A)	ISO 75	°C	105
Specific Heat Capacity	ISO 3146-C-60 °C	J/gK	2.16
Coefficient of linear thermal expansion	ISO 11359-2	K ⁻¹ x10 ⁻⁵	7
Thermal Conductivity	DIN 52612	W/mK	0.19
Degradation temperature		°C	>280
Max service temp. continuous use		°C	80
Max service temp. short term use		°C	90
Sheet forming temp.range		°C	160-190

IMPACT STRENGTHS			
Property	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

ELECTRICAL			
Property	Method	Units	Value
Dielectric constant 50 HZ	DIN 53483		3.6
Volume Resistivity	DIN 53482	Ω.cm	>10 ¹⁵
Surface Resistivity	DIN 53482	Ω	>10 ¹⁴
Dielectric strength	DIN 53481	kV/mm	30
Dissipation Factor (50 HZ)	DIN 53483		0.06