

Cast Acrylic Technical Details

Property	Units	Results	Test method:ASTM
Specific Gravity		1.19	D 792-60 T
Optical			
Refractive Index		1.49	D 542-50
Light Transmittance			D 1003-61
• Parallel	%	92	
• Total	%	93	
• Haze	%	1	
Mechanical			
Tensile Strength			D 638-61 T
• Rupture	kg/cm ²	760	
• Modulus of Elasticity	kg/cm ²	30000	
• Elongation	%	4.5	
Flexural Strength			D 790-63
• Rupture	kg/cm ²	1050	
• Modulus of Elasticity	kg/cm ²	30000	
Compressive Strength			D 695-63 T
• Yield	kg/cm ²	1260	
• Modulus of Elasticity	kg/cm ²	30000	
Shear Strength	kg/cm ²	630	D 732-46
Impact Strength			D 256-56
• Izod Milled Notch (200 gr.steel ball)	m	0.4	
Rock Well Hardness		M 100	D 785-62
Thermal			
Hot Forming Temperature	°C	140-180	
Heat Distortion Temperature 2°C/min-264 p.s.i.	°C	85	D 648-56
Maximum Recommended Continuous Srve Temperature	°C	85	
Coefficient of Thermal Conductivity	Cal/cmsec.°C	0.0006	D 696-44
Coefficient of Thermal Linear Expansion	cm/cm.°C	0.00007	
Specific Heat	Cal/gr°C	0.35	
Electrical			
Surface Resistivity 28°C,75% RH	ohm	>10 ¹⁶	
Volume Resistivity	ohm.h.cm	>10 ¹⁶	D 257-61
Dielectric Strength Short Time Test (0.125 sec.)	kv/cm	160	D 149-64
Arc Resistance		No Track	D 495-61
Miscellaneous			
Flammability	mm/min	33	D 635-63
Water Absorption			
• Wt.Gain on Immersion for 24hrs	%	0.3	D 570-64
Odor		None	
Taste		None	

