

Resin

Plexiglas[®] V045 acrylic resin

PROPERTIES	VALUE	UNITS	TEST METHOD
Physical			
Melt Flow Rate (230°C / 3.8 kg)	2.3	g / 10 min	ASTM D1238
Specific Gravity	1.19		ASTM D792
Mold Shrinkage	0.2-0.6	%	ASTM D955
Water Absorption (24 hr. immersion)	0.3	% weight gain	ASTM D570
Mechanical			
Tensile Strenght @ Maximum	10,200	PSI	ASTM D638
Tensile Elongation @ Break	6	%	Ш
Tensile Modulus	450,000	PSI	Ш
Flexural Strength, maximum (Yield)	15,000	PSI	ASTM D790
Flexural Modulus	450,000	PSI	ASTM D790
Notched Izod Impact(73°F/23°C)	0.3	ft-lb/in notch	ASTM D256
Rockwell Hardness	91	Μ	ASTM D785
Thermal			
HDT (0.455 MPa; annealed) ¹	202	°F	ASTM D648
HDT (1.82 MPa; annealed) ¹	199	°F	ASTM D648
Vicat Softening Point (50°C/hr; 10N)	217	°F	ASTM D1525
Vicat Softening Point (50°C/hr; 50N)	207	°F	ASTM D1525
Thermal Conductivity	1.3	BTU/hr*ft2*F/in	ASTM C177
Optical			
Refractive Index (ND @ 73°F)	1.49		ASTM D542
Luminous Transmittance (0.125"/3.2 mm.)	92	%	ASTM D1003
Haze (0.125 in./3.2 mm.)	<2	%	ASTM D1003
ASTM Classification		PMMA 0131V2	ASTM D788

Data given are average values and should not be used for specification purposes.

1. Annealing Cycle: 4hrs @ 80°C

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