

Resin

## Plexiglas® V045i acrylic resin

PROPERTIES	VALUE	UNITS	TEST METHOD
<b>Physical</b>			
Melt Flow Rate (230°C / 3.8 kg)	2.1	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
<b>Mechanical</b>			
Tensile Strength @ Maximum	9,800	PSI	ASTM D638
Tensile Elongation @ Break	15	%	"
Tensile Modulus	430,000	PSI	"
Flexural Strength, maximum (Yield)	14,300	PSI	ASTM D790
Flexural Modulus	425,000	PSI	ASTM D790
Notched Izod Impact(73°F/23°C)	0.4	ft-lb/in notch	ASTM D256
Rockwell Hardness	89	M	ASTM D785
<b>Thermal</b>			
HDT (0.455 MPa; annealed) <sup>1</sup>	198	°F	ASTM D648
HDT (1.82 MPa; annealed) <sup>1</sup>	195	°F	ASTM D648
Vicat Softening Point (50°C/hr; 10N)	213	°F	ASTM D1525
Vicat Softening Point (50°C/hr; 50N)	198	°F	ASTM D1525
Thermal Conductivity	1.3	BTU/hr*ft <sup>2</sup> *F/in	ASTM C177
<b>Optical</b>			
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 0200V1CC100-PA018	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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