

PLEXIGLAS® VS

ACRYLIC RESIN

Typical Properties

	Value	Units	Test method
Physical			
Melt Flow Rate (230°C/3.8 kg)	27.0	g/10 min	ASTM D1238
Specific Gravity	1.18	-	ASTM D792
Mold Shrinkage	0.2 - 0.6	%	ASTM D955
Water Absorption (24 hr immersion)	0.3	% weight gain	ASTM D570
Mechanical			
Tensile Strength @ Maximum	9,400	psi	ASTM D638
Tensile Elongation @ Break	3	%	ASTM D638
Tensile Modulus	420,000	psi	ASTM D638
Flexural Strength @ Maximum	14,000	psi	ASTM D790
Flexural Modulus	430,000	psi	ASTM D790
Notched Izod Impact (73°F)	0.3	ft-lb/in notch	ASTM D256
Rockwell Hardness	84	M-scale	ASTM D785
Thermal			
HDT (0.455 MPa; annealed) ¹	177	°F	ASTM D648
HDT (1.82 MPa; annealed) ¹	169	°F	ASTM D648
Vicat Softening Point (50°C/hr; 10N)	189	°F	ASTM D1525
Vicat Softening Point (50°C/hr; 50N)	178	°F	ASTM D1525
Thermal Conductivity	1.3	BTU/hr*ft ² *F/in	ASTM C177
Flammability	HB	Class	ASTM UL94
Optical			
Refractive Index (N _d @ 72°F)	1.49	-	ASTM D542
Luminous Transmittance (0.125 in/3.2 mm)	92	%	ASTM D1003
Haze (0.125 in/3.2 mm)	<1	%	ASTM D1003
Classification			
ASTM Classification	PMMA 0111V7	-	ASTM D788

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

¹ Annealing cycle: 4hrs @ 158°F

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