

# PLEXIGLAS® HFI7

ACRYLIC RESIN

## Typical Properties

	Value	Units	Test method
<b>Physical</b>			
Melt Flow Rate (230°C/3.8 kg)	10.0	g/10 min	ASTM D1238
Specific Gravity	1.17	-	ASTM D792
Mold Shrinkage	0.3-0.6	%	ASTM D955
Water Absorption (24 hr immersion)	0.3	% weight gain	ASTM D570
<b>Mechanical</b>			
Tensile Strength @ Maximum	6,800	psi	ASTM D638
Tensile Elongation @ Break	35	%	ASTM D638
Tensile Modulus	355,000	psi	ASTM D638
Flexural Strength @ Maximum	12,400	psi	ASTM D790
Flexural Modulus	355,000	psi	ASTM D790
Notched Izod Impact (73°F)	0.6	ft-lb/in notch	ASTM D256
Rockwell Hardness	65	M-scale	ASTM D785
<b>Thermal</b>			
HDT (0.455 MPa; annealed) <sup>1</sup>	191	°F	ASTM D648
HDT (1.82 MPa; annealed) <sup>1</sup>	179	°F	ASTM D648
Vicat Softening Point (50°C/hr; 10N)	203	°F	ASTM D1525
Vicat Softening Point (50°C/hr; 50N)	184	°F	ASTM D1525
Thermal Conductivity	1.4	BTU/hr*ft <sup>2</sup> *F/in	ASTM C177
Flammability	HB	Class	ASTM UL94
<b>Optical</b>			
Refractive Index (N <sub>d</sub> @ 72°F)	1.49	-	ASTM D542
Luminous Transmittance (0.125 in/3.2 mm)	91	%	ASTM D1003
Haze (0.125 in/3.2 mm)	<2	%	ASTM D1003
<b>Classification</b>			
ASTM Classification	PMMA 0221V4	-	ASTM D788

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

<sup>1</sup> Annealing cycle: 4hrs @ 176°F

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