

Dayson Polymers, LLC
Diap. (Diapolyacrylate Co. Ltd.)
Average Physical Properties of PMMA
ACRYPET VH#001 Heat Stabilized

Test Item	Test Method	Condition	Metric Units	Results	US Units	Results
Melt Flow Rate	D1238	230°C 3.8 kg.	g/19 min	1.19		
Tensile Strength (Rupture)	D638	ASTM 1	kg/cm ²	740	psi	10525
Elongation at Rupture	D638	ASTM 1	%	5		
Flexural Modulus	D790	1/4"	kg/cm ²	3.2 x 10 ⁴	psi	45.51 X 10 ⁴
Molding Shrinkage	D955		%	0.2 – 0.6		
Impact Strength	D256	1/4" notch	kg.cm/cm	1.7	ft-lb/in	.391
Specific Gravity	D792			1.19		
Heat Distortion Temp.	D648	18.56kg	°C	100	°F	212
Rockwell Hardness	D785	M scale		100		
Optical Light Transmittance Total	D1003	3.2mm	%	93		
Refractive Index	D542			1.49		
Water Absorption	D570	24 hrs.	%	0.3		
Thermal Specific Heat		Cal/g/°C		0.35	ft-lb/lb°F	272
Coefficient of Linear Thermal Expansion	D696		cm/cm/°C	6 x 10 ⁵	in/in-°F	3.33 x 10 ⁵
Coefficient of Thermal Conductivity	D177	Cal/sec. cm.°C/cm		5 x 10 ⁴		
Vicat Softening Temperature	D1525	1 kg.	°C	115	°F	239
Modulus of Elasticity	D638	ASTM 1	kg/cm ²	3.3 x 10 ⁴	psi	46.93 X 10 ⁴
Bending Strength	D790	1/4"	kg/cm ²	1100	psi	15645
Compressive Strength	D695		kg/cm ²	1100	psi	15645
Falling Ball Impact	D6717		cm	125	ft.	4.101