

Dayson Polymers, LLC
Diap. (Diapolyacrylate Co. Ltd.)
Average Physical Properties of PMMA
ACRYPET IR H70 Impact Modified

Test Item	Test Method	Condition	Metric Units	Results	US Units	Results
Melt Flow Rate	D1238	230°C 3.8 kg.	g/19 min	1		
Tensile Strength (Rupture)	D638	ASTM 1	kg/cm ²	330	psi	4693
Elongation at Rupture	D638	ASTM 1	%	90		
Bending Strength	D695	1/4"	kg/cm ²	420	psi	5973
Flexural Modulus	D790	1/4"	kg/cm ²	1.4 x 10 ⁴	psi	19.91 X 10 ⁴
Impact Strength	D256	1/4" notch	kg.cm/cm	9	ft-lb/in	2.07
Specific Gravity	D792			1.14		
Rockwell Hardness	D785	M scale		37		
Optical Light Transmittance Total	D1003	3.2mm	%	92		
Refractive Index	D542			1.49		
Water Absorption	D570	24 hrs.	%	0.4		
Thermal Specific Heat		Cal/g/°C		0.35	ft-lb/lb°F	272
Coefficient of Linear Thermal Expansion	D696		cm/cm/°C	12 x 10 ⁻⁵	in/in-°F	6.66 x 10 ⁻⁵
Coefficient of Thermal Conductivity	D177	Cal/sec. cm.°C/cm		5 x 10 ⁻⁴		
Vicat Softening Temperature	D1525	1 kg.	°C	101	°F	213.8
Heat Distortion Temp.	D648	18.56kg	°C	86	°F	186