

# Diap. Diapolyacrylate Company Limited

## Physical properties of PMMA

### ACRYPET™

	Property	Test Method	Condition	Unit	MD
Physical	Density	ISO 1183	-	g/cm <sup>3</sup>	1.19
	Total luminous transmittance	ISO 13468	3mm	%	93
	Haze	ISO 14782	3mm	%	0.3
	Refractive index	ISO 489	n <sub>D</sub>	-	1.49
	Water absorption	ISO 62	24 hr	%	0.3
Thermal	Specific heat	JIS K7123	-	J/g·°C	1.5
	Coefficient of linear thermal expansion	JIS K7197	-	1/°C	6 x 10 <sup>-5</sup>
	Thermal conductivity	JIS A1412	-	W/m·°C	0.2
	Temperature of deflection under load	ISO 75	1.8MPa	°C	87
	Melt flow rate	ISO 1133	230°C ,37.3N	g/10min	6.0
	Spiral flow length (2mm thickness)	MCC Method	230°C	mm	190
	Mold shrinkage	MCC Method	-	%	0.2-0.6
Mechanical	Tensile strength	ISO 527	1 A/5	MPa	71
	Elongation	ISO 527	1 A/5	%	6
	Modulus of elasticity	ISO 527	1 A/1	GPa	3.3
	Flexural strength	ISO 178	-	MPa	130
	Flexural modulus	ISO 178	-	GPa	3.3
	Charpy impact strength	ISO 179	1eA V notched	kJ/m <sup>2</sup>	1.4
Electrical	Surface resistivity	JIS K6911	-	Ωm	> 10 <sup>16</sup>
	Electrical volume resistivity	JIS K6911	-	Ωm	> 10 <sup>13</sup>
	Dielectric strength	JIS K6911	4k V/sec	MV/m	20
	Dielectric constant	JIS K6911	60Hz	-	3.7
	Power factor	JIS K6911	-	-	0.05
	Flammability	UL 94	1.5mm,3.0mm	-	HB

Remark : The values shown here are typical values and are not guarantee values.

\* These properties are for all color except total luminous transmittance and haze,those are for only natural color 001.