



寶禾國際科技有限公司
 BOTH HARVEST TECHNOLOGY CO., LTD.

Properties of Acrylic Sheet

Commodity: PMMA(Acrylic) Sheet

Thickness: 0.5mm-3.0mm

Division	Test Item	Test Method	Unit	Physical Properties	
				Before coating	After coating
Physical Properties	Specific Gravity	ASTM D 792	g/cm ²	1.19	1.19
	Electric Line Clarity	ASTM D 1003	%	92	93
	Haze	ASTM D 1003	%	1.0	1.0
	Refractive Index	ASTM D	%	1.5	1.52
	Transmittance	ASTM D 1003	%	92	92
	Yellowing	ASTM D 1003	YI	1.5 or less	1.5 or less
Mechanical Properties	Tensile Strength	ASTM D 638	MPa	75	64
	Refractive Elasticity	ASTM D 790	MPa	98	294
	Bending Strength	ASTM D 790	MPa	118	90
	Dyratat Impact Strength	DIN 53453	Kg-cm/cm	5.1	4.0
Surface Friction	Hardness	ASTM D 785	M-scale	100	100
	Surface Pencil Hardness	JIS-K5400	H/1Kg. Force	2-3	5-6
	Wear resistance	ASTM D 1004	%(haze)	15	3
	Steel wool test (note 1)	ASTM D	g	1000	10
	Pencil hardness	JIS D 202	H	2	4-6
Endurance	Heat resistance	24hrs at 70°C	-	No change	No change
	Warm water resistance	24hrs in a warm bath at 40°C	-	No change	No change
	Thermal Cycle Test	10hrs at -30°C	-	No change	No change
10hrs at 25°C					

Thermal Properties	Weight transformation temperature	8.5kg /cm2	ASTM D	°C	95	95
		4.6kg /cm2			104	104
	Coefficient of linear(thermal) expansion		ASTM E 228	Cm/cm/°C	6.0x10E-5	6.0x10E-5
Electrical Properties	Surface Resistance		ASTM D	Ω	10E16	10E16
	Dielectric Breakdown strength		ASTM D	Kv/mm	20	20
Drug Resistance	Hydrochloric acid(5%)		-	-	No change	No change
	Alkali(5%)		-	-	No change	No change
	Saline solution(10%)		-	-	No change	No change
	Methanol		-	-	No change	No change
	Ethanol		-	-	No change	No change
	Toluene		-	-	No change	No change
	Gasoline		-	-	No change	No change

Note 1. : Lowest weight is indicated when a blur clearly appears from the sample after pushing #1000 steel wool of a round pad(area:4.81cm²) and turning is at 40rpm 100 times.

We hereby certify that the above is typical properties and are not intended for specification purposes.

Q.C. Manager