

Non-Birefringent Acrylic Physical Properties

Properties	Test Method		Unit	Normal Grade	Hard Coat Grade
	JIS	ASTM			
OPTICAL					
Refractive Index	K7105	D-542	-	1.49	1.49 (Material) 1.53 (Surface)
Total Light Transmittance	K7105	D-1003	%	92-93	92-93
Haze	K7105	D-1003	%	0.1	0.1
MECHANICAL					
Elongation	K7113	D-638	%	5	3
Tensile Rupture Strength	K7113	D-638	MPa	75	50
Flexural Rupture Strength	K7203	D-790	MPa	118	60
Flexural Modulus	K7203	D-790	MPa	3.2×10^3	3.2×10^3
Impact Strength (Izod)	K7110	D-256	KJ/m ²	2.0	-
Rockwell Hardness	K7202	D-785	M scale	100	-
Pencil Hardness	D0202	-	-	2-3H	6-8H
THERMAL					
Heat Distortion Temperature	K7121	D-638	°C	110	110
Coefficient of Thermal Expansion	K6911	D-638	cm/cm/°C	7×10^{-5}	7×10^{-5}
Coefficient of Thermal Conductivity	K1413	C-177	W/m°C	0.17	0.17
Maximum recommended Continuous temperature	-	-	°C	80	80
Heat Forming Temperature	-	-	°C	140-180	-
Specific Heat	K7123	-	J/g°C	1.47	1.47
ELECTRICAL					
Volume Resistance	K6911	D-257	Ωcm	$> 10^{16}$	$> 10^{16}$
Surface Resistance	K6911	D-257	Ω	$> 10^{16}$	$> 10^{16}$
CHEMICAL RESISTANT					
Acetone	Test Condition :			△	○
Methyl Alcohol (50%)	Tested after immersing for 24 hours			○	○
Detergent				○	○
Sulfuric acid (10%)	○ ... no change			○	○
Caustic soda (10%)	△ ... a little change			○	○
Dichloromethane	x ... changed			x	○
Kerosene				○	○
MISCELLANEOUS					
Specific Gravity	K7112	D-792	-	1.19	1.19
Water Absorption	K7209	D-570	%	0.3	0.3
Flammability	UL Standard		≥0.8mm thick	94HB	94HB

These are our experimental measured values in No. 000 Clear 3.0mm thickness.

Specifications are subject to change at any time.