techplast
COATED PRODUCTS, INC.
Special Application Acrylic Sheet

www.Techplast.com

Clarex® Physical Properties

PROPERTIES	TEST METHOD JIS	ASTM	UNIT	NORMAL GRADE	HARD COAT GRADE
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	5
Tensile Rupture Strength	K7113	D-638	MPa	70	45
Flexural Rupture Strength	K7203	D-790	MPa	118	60
Impact Strength (Izod)	K7110	D-256	KJ/m2	2.0	-
Rockwell Hardness	K7202	D-785	M scale	100	-
Pencil Hardness	D0202	-	-	2H	6-8H
THERMAL					
Heat Distortion Temp.	K7207	D-648		110	110
Coefficient of Thermal Expansion	K6911	D-696	cm/cm/	7×10^{-5}	7×10^{-5}
Coefficient of Thermal Conductivity	K1413	-	W/m	0.17	0.17
Max Recm'd Continuous Temp.	-	-		80	80
Heat Forming Temperature	-	-		140-180	-
Specific Heat	K7123	-	J/g?	1.47	1.47
ELECTRICAL					
Volume Resistance	K6911	D-257	cm	$.10^{16}$	$.10^{16}$
Surface Resistance	K6911	D-257		$.10^{16}$	$.10^{16}$
CHEMICAL RESISTANT					
Acetone				—	o
Methyl Alcohol (50%)				o	o
Detergent				o	o
Sulfuric acid (10%)				o	o
Caustic soda (10%)				o	o
Dichloromethane				x	o
Kerosene				o	o
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

Test Condition
Tested after immersing for 24 hours

o - No Change
— - Slight Change
x - Changed