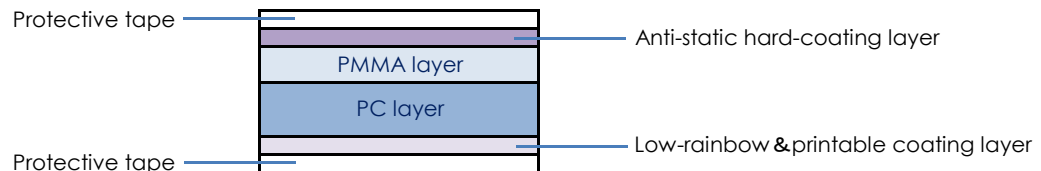


# ARCHLITE® Phoenix PX89U

## Description

ARCHLITE® Phoenix PX89U is high-quality clear hard-coated PC/PMMA bi-layer sheet offering low-warpage function under the high-temperature & high-humidity condition together with anti-static & abrasion resistance function on PMMA side and low-rainbow & easy-printable function on PC side.

## Structure



## Typical property values

Property	Test Method	Units	Phoenix PX89U	
			PMMA side	PC side
<b>Optical</b>				
Total light transmittance	ISO 13468-1 1996	%	91	
Haze	ISO 14782 1999	%	0.1	
<b>Mechanical</b>				
Density	ISO 1183 1987	g/cm <sup>3</sup>	1.2	
Tensile strength of material	ISO 527-3 1995	MPa	58 - 59	
Nominal tensile strain at break	ISO 527-2 1993	%	6 - 20	
Tensile modulus	ISO 527-3 1995	GPa	2.5	
Flexural modulus	JIS K 7171	MPa	3000	
Linear expansion rate	ISO 20753 2008	K <sup>-1</sup>	10 <sup>-5</sup>	
<b>Physical</b>				
Pencil hardness	ISO/DIS 15184 1996 (750gf)	-	3H	B
	ASTM D3363 (1000gf)	-	3H	B
Steel wool hardness	MSK method (2Kgf/4cm <sup>2</sup> ·10RT)	-	1 - 2	3 - 4
<b>Electrical</b>				
Surface resistivity	IEC60093	Ω	< 1×10 <sup>13</sup>	
Relative permittivity	IEC 60249-1 1982 (1M Hz)	-	2.7	
Dielectric tangent	IEC 60249-1 1982 (1M Hz)	-	0.010	
<b>Thermal</b>				
Heat and humidity	85degree C/85%RH * 120hrs.	(Warpage) mm (Appearance)	< 0.1 No change	
<b>Chemical</b>				
Ethyl alcohol	MSK method	(Appearance)	No change	No change
Sodium hydroxide (NaOH) 0.5%	MSK method	(Appearance)	No change	No change
Hydrochloric acid (HCl) 0.5%	MSK method	(Appearance)	No change	No change
Salt water 5%	MSK method	(Appearance)	No change	No change
White gasoline	MSK method	(Appearance)	No change	No change
N-hexane	MSK method	(Appearance)	No change	No change

※These are typical properties and are not intended for specification purpose.

® = registered trademark

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