

PRODUCT DESCRIPTION - DATA SHEET

PolyLine™ 4449E polycarbonate film is one side velvet one side polished transparent polycarbonate film which endures extreme temperature conditions. They are completely suitable for printing with high quality results even without making pre-treatment. They are widely used for screen printing for automotive, labels, membrane switches, overlays, automotive dials, speedometers, thermoforming and etc. Thanks to the mar resistance the velvet texture offers, can be used over LEDs.

Properties	Standard	Unit	Typical Value
Physical Properties			
Density	ISO 1183	g/cm ³	1.2
Water Absorption 24 hrs	ASTM D570	%	0.35
Taber Abrasion	-	-	-
Optical Properties			
Haze	ASTM D1003	%	42
Light Transmission	ASTM D1003	%	>88
Yellowness Index	ASTM D1925	%	0,9
Mechanical Properties			
Tensile Strength	ISO 527	MPa	60
Tensile Strength	ASTM D882	psi	8500
Elongation at Break	ISO 527	%	>100
Bend Strength	ISO 178	MPa	91
Tensile Modulus	ISO 178	MPa	2400
Surface Tension	Test Fluid	dyn/cm	≥38
Electrical Properties			
Dielectric Constant	IEC60250	-	3
Resistant Puncture Voltage	IEC60243	MV/mm	30
Surface Resistivity	IEC60093	Ω/square	1.00E+16
Volume Resistivity	IEC60093	Ω-cm	1.00E+17
Thermal Properties			
Coefficient of Thermal Expansion	ISO 11359	×10 ⁻⁵ /°C	5.8
Thermal Conductivity Rate	ISO 11359	W/(m*K)	0.2
Thermal Conductivity Rate	ASTM D5470	Btu/hr/ft ² /°F/in	1,35
Thermal Shrinkage (150°C)	ASTM D1204	%	1,4
Tg	ISO306	°C	152
Flammability			
UL94	E249605	-	V-2 / VTM-2

Tip: This test data is for reference only, not as an absolute application index.

Thicknesses: 0,175 mm to 0,750 mm.

CONTACT US:

Shadowline Polimer / Atatürk Mahallesi Erzincan Sokak No:19 34758 Ataşehir, İstanbul/Türkiye
T: + 90 216 575 1162 | F: + 90 216 577 2549 | info@shadowline.com.tr

