

## TECHNICAL DATA SHEET

### FR Polycarbonate Film

ProductName & No: **FR11**



### Product Description

PolyLine FR11 flame-retardant film is a clear, thin-gauge polycarbonate film with polished surfaces on both sides, and a UL94 V-0 listing to meet the stringent requirements in a wide range of electrical, electronic and transportation applications. PolyLine FR11 film offers ease of thermoforming, hydroforming, embossing, die-cutting, folding and bending and is a very suitable for applications such as printed circuit board insulation, backlit aircraft in-flight panels and displays, business equipment insulation, computer rack partition and TV and monitor insulation.

### Product Datasheet

Item	Property	Value	Unit	Test Method
Physical	Density	1.32	g/cm <sup>3</sup>	ISO 1183
	Haze	<0.5	%	ASTM D1003
	Light Transmission	89	%	ASTM D1003
Mechanical	Tensile Strength	60	MPa	ISO 527
	Elongation	<50	%	ISO 527
	Bend Strength	90	MPa	ISO 178
	Tensile Modulus	2300	MPa	ISO 178
	Surface Tension	≥34	dyn/cm	Test Fluid
Electrical	Dielectric Constant	3	-	IEC60250
	Resistant Puncture Voltage	30	MV/mm	IEC60243
	Surface Resistivity	1.00E+16	Ω/square	IEC60093
	Volume Resistivity	1.00E+17	Ω-cm	IEC60093
Thermal	Coefficient of Thermal Expansion	5.8	x10 <sup>-5</sup> /°C	ISO 11359
	Thermal Conductivity Rate	0.2	W/(m*K)	ASTM D5470
	Thermal Shrinkage	0.5~0.7	%	ASTM D1204
	Tg	152	°C	ISO306
Flammability	Grade of Resistant Flame	V-0	E249605	

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