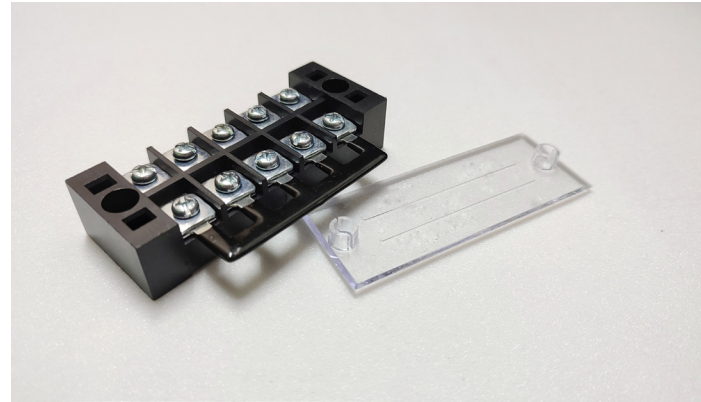# PolymerShield

PolymerShield is a flame-retardant polypropylene designed to meet the stringent UL 94 V-O and VTM-0 standards, offering exceptional safety and reliability. Manufactured in the USA, it combines chemical resistance, waterproof, and dielectric insulation, making it ideal for applications like separators, blanking panels, industrial insulators, and busbars. With versatile processing options such as thermoforming, die cutting, and cold forming, Polymershield is perfect for industries including power insulation, data farms, power distribution, consumer electronics, and medical equipment.

Benefits

- Flame retardant - UL 94 V-O & VTM-0
- Easy to process
- Manufactured in the USA
- Chemical Resistant
- Water Proofing
- Dielectric Insulation

Markets

- Separators
- Blanking Panels
- Cover
- Industrial Insulator
- Busbar

Applications

- Power Insulation
- Data Farm
- Power Distribution
- Consumer Electronics
- Medical Equipment

PolymerShield Properties

Flammability Properties

Property	Nominal	Method
Flammability	VTM-0	UL 94
	V-0	

Mechanical Properties

Property	Nominal	Method
Tensile Yield	3700 psi	ASTM D882
Izod Impact	300 J/m	ASTM D-256
Elongation	278%	ASTM D-882
Flex Modulus	288,000 psi	ASTM D-790
Living Hinge Performance	>225,000	MIT Testing Procedure @ 0.010″
Density	1.045	ASTM D-792

Electrical Properties

Property	Nominal	Method
Volume Resistivity	1 x 10^16 ohm-cm	ASTM D257
Breakdown Voltage @ 0.030″	39.9 kV	ASTM D150
Dissipation Factor	0.0022	ASTM D150
High Voltage Arc Tracking	0 PLC in/min	UL746a
Hot Wire Ignition	0 PLC - Seconds	UL746a
Comparative Tracking Index	0 PLC / 600V	ASTM D3638

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