



LithiumPrevent 200 is an intumescent thermoplastic composite that is fire resistant and electrically insulative.

Availability	Americas, Europe, Asia-Pacific
Features	Intumescent, Fire Resistant, Electrically Non-Conductive
Colour Availability	White, Natural
Forms	Pellets, Powder
Processing Method	Injection Molding, Extruding, Over Molding, Thermoforming

Physical Properties	Value	Unit	Test Standard
Density	1.54	g/cm ³	ASTM D792-20
Start Expansion Temperature	200	°C	INTERNAL
Expansion Rate	2-3x	Original Volume	INTERNAL

Mechanical Properties	Value	Unit	Test Standard
Tensile Stress	13.9	MPa	ASTM D638-10
Flexural Modulus	176	MPa	ASTM D790-10
Flexural Yield Stress	24.9	MPa	ASTM D790-10
Flexural Yield Displacement	31.5	MPa	ASTM D790-10
Shore Hardness (D)	D67	MPa	ASTM D2240-15

Thermal Properties	Value	Unit	Test Standard
Melting Temperature	129	°C	INTERNAL
Thermal Diffusivity	0.142	mm ² /s	ASTM E2585-09
Thermal Conductivity	0.259	W/(m*K)	ASTM E2585-09



Electrical Properties	Value	Unit	Test Standard
Dielectric Strength	>2.65	kV/mm	ASTM D3755
Dielectric Strength	9.5	kV/mm	ASTM D149
Volume Resistivity	8.59E+13	Ω *cm	ASTM D257

Flammability Properties	Value	Unit	Test Standard
4mm Vertical Burn	V-0	-	UL 94 Verticle Burn
4mm Horizontal Burn	HB-0	-	UL 94 Horizontal Burn
4mm Torch & Grit	6	cycles	UL 2596 Torch & Grit

Injection Molding	Value	Unit	Test Standard
Barrel Temperature	135-150	$^{\circ}$ C	INTERNAL
Mold Temperature	20-55	$^{\circ}$ C	INTERNAL
Quenching Bath Temperature	25	$^{\circ}$ C	INTERNAL
Maximum Process Temperature	180	$^{\circ}$ C	INTERNAL