

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

General	
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	1.43	g/cm ³	ASTM D792-20
Start Expansion Temperature	200	°C	INTERNAL
Water Absorption	0.14	%	ASTM D570-22
Expansion Rate	2x	Original Volume	INTERNAL

Mechanical Properties	Value	Unit	Test Standard
Tensile Modulus	3330	MPa	ASTM D638-22
Tensile Strength	36.4	MPa	ASTM D638-22
Elongation at Break	6.3	%	ASTM D638-22
Poisson's Ratio	0.37	-	ASTM D638-22
Izod Notched Impact Strength	50	J/m,C(complete break)	ASTM D256-23 Method A
Shore Hardness (D)	80	-	ASTM D2240-15

Thermal Properties	Value	Unit	Test Standard
Heat Deflection Temperature	66.8	°C	ASTM D648-18
Melting Temperature	150	°C	INTERNAL

Start Expansion Temperature	200	°C	INTERNAL
Coefficient of Linear Thermal Expansion	6.13E-05	/°C	ASTM D696-16
Thermal Diffusivity	0.149	mm ² /s, at 25 °C	ASTM E2585-09
Electrical Properties	Value	Unit	Test Standard
Dielectric Strength	16.27	kV/mm	ASTM D3755-20
Volume Resistivity	9.92E+15	Ω*cm	ASTM D257-14
Flammability Properties	Value	Unit	Test Standard
0.89 mm Vertical Burn	V-0	-	UL 94 Section 8
3.2 mm Horizontal Burn	HB	-	ASTM D635-22
Hot Wire Ignition (HWI) Test	PLC-0	-	ASTM D3874-20
Comparative Tracking Index	≥ CTI 600	-	ASTM D3638-21
Injection Molding	Value	Unit	Test Standard
Barrel Temperature	170-185	°C	INTERNAL
Mold Temperature	20-55	°C	INTERNAL
Quenching Bath Temperature	not required	°C	INTERNAL
Maximum Process Temperature	185	°C	INTERNAL
Molding Shrinkage	0.004	in/in	INTERNAL