

AuroraGuard™ F5PC10GF-BK

Aurora Material Solutions, LLC - Polycarbonate

General Information

Product Description

Flame Retardant 10% Glass Filled Polycarbonate

Special Characteristics

- UL94 5VA & V-0 10%GF FR PC w/ sustainable feedstreams, Suitable for Structural Foam Molding
- UL Yellow Card File number E175765

Formerly known as GEP F5PC10GF-BK

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight		
Additive	• Flame Retardant		
Features	• Flame Retardant		
Uses	• Electrical/Electronic Applications	• Profiles	
UL File Number	• E175765		
Appearance	• Black		
Processing Method	• Injection Molding	• Profile Extrusion	• Structural Foam Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.25		ASTM D792
Molding Shrinkage - Flow (0.126 in)	2.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (Equilibrium)	0.12	%	ASTM D570
Mechanical			
Tensile Strength (Yield)	9000	psi	ASTM D638
Tensile Elongation (Break)	15	%	ASTM D638
Flexural Modulus	550000	psi	ASTM D790
Flexural Strength	15000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F)	2.5	ft·lb/in	ASTM D256
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	296	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	290	°F	ASTM D648
Flammability			
Flame Rating			UL 94
0.06 in		V-0	
0.10 in		5VA	

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	200 to 250	°F
Drying Time	4.0 to 7.0	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	40 to 75	%
Rear Temperature	550 to 590	°F
Middle Temperature	570 to 610	°F



Front Temperature	590 to 630 °F
Nozzle Temperature	580 to 620 °F
Processing (Melt) Temp	590 to 630 °F
Mold Temperature	180 to 240 °F
Back Pressure	50.0 to 100 psi
Screw Speed	25 to 75 rpm
Vent Depth	1.5E-3 to 3.0E-3 in

Notes

¹ Typical properties: these are not to be construed as specifications.

