

AuroraGuard™ F0PC10GF

Aurora Material Solutions, LLC - Polycarbonate

General Information

Product Description

Flame Retardant 10% Glass Filled, UV Stabilized Polycarbonate
 UL94 5VA & V-0 10%GF FR PC w/ Outdoor Exposure Rating (f1)
 UL Yellow Card File number E175765

Formerly known as EnPure F0PC10GF

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	• UV Stabilizer	
Features	• Flame Retardant	• Good Weather Resistance	• UV Stabilized
Uses	• Electrical/Electronic Applications		
UL File Number	• E175765-267506		
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding	• Profile Extrusion	

Properties ¹

Physical	Nominal Value	Unit	Test Method
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
Outdoor Suitability	f1		UL 746C
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	9000	psi	ASTM D638
Tensile Elongation (Break)	15	%	ASTM D638
Flexural Modulus	550000	psi	ASTM D790
Flexural Strength	15500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	2.5	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	296	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	290	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		V-0	
0.13 in		5VA	

Processing Information

Injection	Nominal Value	Unit
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.

