

AuroraGuard™ F5PC20GF

Aurora Material Solutions, LLC - Polycarbonate

General Information

Product Description

20% Glass Filled, Flame Retardant, Polycarbonate w/ release

Formerly known as EnPure F5PC20GF

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Additive	• Flame Retardant • Mold Release
Features	• Flame Retardant • Good Mold Release
Uses	• Electrical/Electronic Applications
Appearance	• Black • Colors Available • Natural Color
Processing Method	• Injection Molding • Profile Extrusion

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.30		ASTM D792
Molding Shrinkage - Flow (0.126 in)	1.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (Equilibrium)	0.15	%	ASTM D570
Mechanical			
Tensile Strength (Yield)	13000	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	720000	psi	ASTM D790
Flexural Strength	20000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F)	1.5	ft·lb/in	ASTM D256
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	280	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	275	°F	ASTM D648
Flammability			
Flame Rating			UL 94
0.06 in		V-0	
0.12 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

