AuroraGuard™ F0PC20GF

Aurora Material Solutions, LLC - *Polycarbonate*

General Information

Product Description			
UL94 5VA & V-0 20% Glass Filled, Flame Retardant, Polycarbonate w/ release Formerly known as EnPure F0PC20GF			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Additive	• Flame Retardant	• Mold Release	
Features	• Flame Retardant		
Uses	• Electrical/Electronic Applications		
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding	• Profile Extrusion	

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density / Specific Gravity	1.35		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	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield)	15800	psi	ASTM D638
Tensile Elongation (Break)	6.0	%	ASTM D638
Flexural Modulus	785000	psi	ASTM D790
Flexural Strength	18500	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F)	3.0	ft·lb/in	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	301	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	296	°F	ASTM D648
CLTE - Flow	1.8E-5	in/in/°F	ASTM E831
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	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
Injection Notes	
Maximum Drying Time 7.0 hrs.	

Notes

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