

AuroraGuard™ F040GF

Aurora Material Solutions, LLC - Polycarbonate

General Information

Product Description

Flame Retardant, 40% Glass Reinforced Polycarbonate
Formerly known as EnPure F040GF

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight		
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	1.52		ASTM D792
Molding Shrinkage - Flow (0.126 in)	1.0E-3 to 2.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	23000	psi	ASTM D638
Tensile Strength (Break)	22500	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	1.40E+6	psi	ASTM D790
Flexural Strength	27000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.5	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	305	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	295	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.13 in)	V-0		UL 94

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 hrs

