

AuroraGuard™ PC40GF

Aurora Material Solutions, LLC - Polycarbonate

General Information
Product Description

Flame Retardant, 40% Glass Reinforced Polycarbonate

Formerly known as EnPure 40GF

General

Material Status	<ul style="list-style-type: none"> Commercial: Active 		
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America
Filler / Reinforcement	<ul style="list-style-type: none"> Glass Fiber, 40% Filler by Weight 		
Features	<ul style="list-style-type: none"> Flame Retardant 		
Uses	<ul style="list-style-type: none"> Electrical/Electronic Applications 		
Appearance	<ul style="list-style-type: none"> Black 	<ul style="list-style-type: none"> Colors Available 	<ul style="list-style-type: none"> Natural Color
Processing Method	<ul style="list-style-type: none"> Injection Molding 	<ul style="list-style-type: none"> 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

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

