

AuroraGuard™ PX50GF

Aurora Material Solutions, LLC - Polyamide

General Information

Product Description

50% Glass Filled, Amorphous Nylon

Formerly known as EnLon PX50GF

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Features	• Amorphous
Uses	• Metal Replacement
Appearance	• Black
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.65		ASTM D792
Molding Shrinkage - Flow (0.126 in)	4.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.94E+6	psi	ASTM D638
Tensile Strength (Yield)	37700	psi	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	2.67E+6	psi	ASTM D790
Flexural Strength	56600	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	2.1	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	111		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	451	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	433	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	175	°F
Drying Time	2.0 to 12	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	25 to 75	%
Rear Temperature	500 to 540	°F
Middle Temperature	510 to 550	°F
Front Temperature	520 to 560	°F
Nozzle Temperature	520 to 560	°F
Processing (Melt) Temp	520 to 560	°F
Mold Temperature	250 to 285	°F
Back Pressure	25.0 to 75.0	psi



Screw Speed	60 to 120 rpm
Vent Depth	1.0E-3 in

Notes

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

