

AuroraGuard™ PA6GF40BK

Aurora Material Solutions, LLC - Polyamide 6

General Information

Product Description

AuroraGuard™ PA06GF40BK is a 40% Fiberglass Reinforced, Black Nylon 6 Injection Molding Grade.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Uses	• Automotive Applications
Appearance	• Black
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.43		ASTM D792
Molding Shrinkage - Flow (0.126 in)	2.0E-3 to 4.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	25400	psi	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	1.62E+6	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	2.2	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	401	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	175	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	460 to 520	°F
Middle Temperature	480 to 540	°F
Front Temperature	480 to 540	°F
Mold Temperature	175 to 245	°F
Back Pressure	50.8 to 102	psi
Screw Speed	60 to 90	rpm
Injection Notes		
Maximum Drying Time 4.0 hrs		

