

AuroraGuard™ 40GF0701

Aurora Material Solutions, LLC - Polypropylene Homopolymer

General Information
Product Description

40% Glass Reinforced Chemically Coupled Homopolymer Polypropylene

Formerly known as SimPoly 40GF0701

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	• Lawn & Garden Equipment	• Material Handling
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.22		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	12	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	1.0E-3 to 4.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (73°F)	13000	psi	ASTM D638
Tensile Elongation (Yield)	4.0	%	ASTM D638
Flexural Modulus (73°F)	1.07E+6	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)	325	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	305	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0	hr
Suggested Max Moisture	0.20	%
Suggested Shot Size	25 to 75	%
Rear Temperature	375 to 450	°F
Middle Temperature	375 to 450	°F
Front Temperature	375 to 450	°F
Nozzle Temperature	375 to 450	°F
Processing (Melt) Temp	375 to 450	°F
Mold Temperature	90 to 160	°F
Back Pressure	25.0 to 100	psi
Vent Depth	1.0E-3 to 1.5E-3	in

