

## AuroraGuard™ PBT30GF-71905

Aurora Material Solutions, LLC - Polybutylene Terephthalate

### General Information

#### Product Description

AuroraGuard™ PBT30GF-71905 is a 30% Fiberglass Reinforced, Black Polybutylene Terephthalate (PBT) Injection Molding Grade.

#### General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Crystal	• High Temperature Stiffness	• Solvent Resistant
	• Good Adhesion	• Medium-high Viscosity	
	• Good Moldability	• Oil Resistant	
Uses	• Automotive Electronics	• Connectors	• Cookware Handles
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

### Properties <sup>1</sup>

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.53		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	18	g/10 min	ASTM D1238
Molding Shrinkage - Flow	3.0E-3 to 5.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow	4.0E-3 to 6.0E-3	in/in	ASTM D955
<b>Mechanical</b>			
Tensile Strength (Break)	16800	psi	ASTM D638
Tensile Elongation (Yield)	2.5	%	ASTM D638
Flexural Modulus	1.21E+6	psi	ASTM D790
Flexural Strength	27900	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (73°F)	1.5	ft·lb/in	ASTM D256
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	400	°F	ASTM D648
<b>Flammability</b>			
Flame Rating (0.63 in)	HB		Internal Method

### Processing Information

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	225	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	460 to 490	°F
Middle Temperature	470 to 500	°F
Front Temperature	480 to 510	°F
Nozzle Temperature	470 to 500	°F
Mold Temperature	150 to 200	°F
Injection Rate	Moderate	
Back Pressure	50.0 to 300	psi
Screw Speed	40 to 80	rpm

