

AuroraTec™ PC-PBT 15GFR

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information

Product Description

Injection molding grade of Polycarbonate/Polybutylene Terephthalate (PC/PBT). Antimony-free flame retardant grade. 15% fiberglass reinforced grade. UV stabilized with mold release.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight		
Additive	• Flame Retardant	• Mold Release	• UV Stabilizer
Features	• Antimony Free • Chemical Resistant • Flame Retardant	• Good Dimensional Stability • Good Mold Release • Good Stiffness	• UV Stabilized
Uses	• Electrical/Electronic Applications • Industrial Applications	• Outdoor Applications • Power/Other Tools	
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding		

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.42		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	22	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	4.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	13900	psi	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	761000	psi	ASTM D790
Flexural Strength	22000	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 (264 psi, Unannealed)	284	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating			Internal Method
0.06 in		V-0	
0.10 in	•	V-0	
	•	5VA	
0.12 in		5VA	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	470 to 510	°F
Middle Temperature	480 to 520	°F
Front Temperature	500 to 560	°F
Nozzle Temperature	490 to 550	°F



Mold Temperature	150 to 190 °F
Injection Rate	Moderate-Fast
Back Pressure	50.0 to 150 psi
Screw Speed	50 to 80 rpm

Notes

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

