

AuroraGuard™ F5PC/PBT10GF

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information
Product Description

Flame Retardant PC-PBT Alloy w/ UV Stabilizer, UL File Number E175765

Formerly known as EnCounter F5PC/PBT10GF

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight		
Additive	• Flame Retardant	• UV Stabilizer	
Features	• Flame Retardant	• UV Stabilized	
Uses	• Electrical/Electronic Applications	• Housings	
UL File Number	• E175765		
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.30		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	30	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.126 in)	4.0E-3 to 8.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow	4.0E-3 to 8.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	9760	psi	ASTM D638
Flexural Modulus	410000	psi	ASTM D790
Flexural Strength	15100	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.2	ft·lb/in	ASTM D256
Unnotched Izod Impact	13	ft·lb/in	ASTM D4812
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	117		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	228	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	214	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	V-0		
0.13 in	5VA		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230 to 250	°F
Drying Time	2.0 to 6.0	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	45 to 75	%
Rear Temperature	470 to 520	°F
Middle Temperature	480 to 530	°F
Front Temperature	495 to 540	°F



Nozzle Temperature	490 to 520 °F
Processing (Melt) Temp	500 to 535 °F
Mold Temperature	150 to 200 °F
Back Pressure	50.0 to 100 psi
Screw Speed	40 to 75 rpm
Vent Depth	1.5E-3 to 3.5E-3 in

Notes

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

