

## AuroraGuard™ F51001

Aurora Material Solutions, LLC - *Polybutylene Terephthalate*

### General Information

#### Product Description

Flame Retardant PBT

Formerly known as EnCounter F51001

#### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Additive	• Flame Retardant		
Features	• Flame Retardant		
Uses	• Automotive Applications	• Electrical/Electronic Applications	
	• Business Equipment	• Structural Parts	
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding		

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

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Molding Shrinkage - Flow (0.126 in)	0.011 to 0.018	in/in	ASTM D955
<b>Mechanical</b>			
Tensile Strength (Yield)	8000	psi	ASTM D638
Tensile Elongation (Break)	15	%	ASTM D638
Flexural Modulus	375000	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (73°F)	0.50	ft·lb/in	ASTM D256
<b>Thermal</b>			
Deflection Temperature Under Load (66 psi, Unannealed)	175	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	165	°F	ASTM D648
<b>Flammability</b>			
Flame Rating			UL 94
0.06 in		V-0	
0.12 in		5VA	

### Processing Information

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	250	°F
Drying Time	3.0 to 5.0	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
Processing (Melt) Temp	480 to 510	°F
Mold Temperature	150 to 190	°F

