

AuroraGuard™ 1PBT30GFIM

Aurora Material Solutions, LLC - Polybutylene Terephthalate

General Information

Product Description

30% Glass Fiber Reinforced, Impact Modified

Formerly known as EnCounter 1PBT30GFIM

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Impact Modifier		
Features	• Impact Modified		
Uses	• Automotive Applications	• Business Equipment	• Electrical/Electronic Applications
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.53		ASTM D792
Molding Shrinkage - Flow (0.126 in)	3.0E-3 to 5.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	17000	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	1.05E+6	psi	ASTM D790
Flexural Strength	27000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	2.4	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	415	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	400	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
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

Notes

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

