

AuroraTec™ 3GF20

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information

Product Description

20% Glass Fiber Reinforced PC/PBT

Formerly known as EnCounter 3GF20

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Uses	• Automotive Applications	• Electrical/Electronic Applications	
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding	• Profile Extrusion	

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.38		ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	20	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.126 in)	4.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	12000	psi	ASTM D638
Tensile Elongation (Break)	> 3.0	%	ASTM D638
Flexural Modulus	565000	psi	ASTM D790
Flexural Strength	15300	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.0	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	320	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	50 to 80	%
Rear Temperature	470 to 510	°F
Middle Temperature	480 to 520	°F
Front Temperature	490 to 530	°F
Nozzle Temperature	490 to 520	°F
Processing (Melt) Temp	500 to 530	°F
Mold Temperature	150 to 190	°F
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 80	rpm
Vent Depth	5.0E-3 to 8.0E-3	in
Injection Notes		
Maximum Drying Time 8.0 hrs		

