

AuroraGuard™ ABS20GF

Aurora Material Solutions, LLC - Acrylonitrile Butadiene Styrene

General Information

Product Description

20% Glass Reinforced

Formerly known as EnCore 20GF

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	• Business Equipment	• Thin-walled Parts
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding	• Profile Extrusion	

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.18		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	3.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.126 in)	4.0E-3 to 7.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	12000	psi	ASTM D638
Tensile Elongation (Break)	4.4	%	ASTM D638
Flexural Modulus	950000	psi	ASTM D790
Flexural Strength	18000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.2	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	215	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	190	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	400 to 480	°F
Middle Temperature	420 to 500	°F
Front Temperature	420 to 500	°F
Nozzle Temperature	420 to 500	°F
Processing (Melt) Temp	420 to 500	°F
Mold Temperature	80 to 140	°F
Back Pressure	50.0 to 100	psi
Injection Notes		
Maximum Drying Time 4 hrs		

Notes

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

