AuroraGuard™ PP20GF
Aurora Material Solutions, LLC - *Polypropylene Copolymer*

General Information

Product Description

20% Glass reinforced Copolymer Polypropylene

Formerly known as EnCom PP20GF

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Features	• Copolymer
Uses	• Automotive Applications • Lawn & Garden Equipment
Appearance	• Black
Processing Method	• Injection Molding

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.02		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	12	g/10 min	ASTM D1238
Molding Shrinkage - Flow			ASTM D955
0.125 in	2.0E-3 to 3.0E-3	in/in	
0.250 in	3.0E-3 to 4.0E-3	in/in	
Water Absorption (24 hr)	0.020	%	ASTM D570

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	390000	psi	ASTM D638
Tensile Strength (73°F)	7250	psi	ASTM D638
Tensile Elongation (Yield, 73°F)	4.0	%	ASTM D638
Flexural Modulus - Tangent (73°F)	464000	psi	ASTM D790
Flexural Strength (73°F)	9430	psi	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	4.0	ft·lb/in	ASTM D256

Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	90		ASTM D785

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	275	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	266	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	170	°F
Drying Time	2.0	hr
Suggested Max Moisture	0.20	%
Suggested Shot Size	25 to 75	%
Rear Temperature	350 to 400	°F
Middle Temperature	360 to 410	°F
Front Temperature	370 to 420	°F
Nozzle Temperature	370 to 420	°F
Processing (Melt) Temp	380 to 420	°F
Mold Temperature	90 to 160	°F
Back Pressure	25.0 to 100	psi
Vent Depth	1.0E-3 to 1.5E-3	in

Injection Notes

Screw Speed: Slow to Medium

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