

AuroraGuard™ PC1220R

Aurora Material Solutions, LLC - Polycarbonate

General Information

Product Description

General Purpose Molding Grade Polycarbonate

Formerly known as GEP PC1220R

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• General Purpose		
Uses	• General Purpose		
Appearance	• Black		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	12	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.126 in)	6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	9000	psi	ASTM D638
Tensile Elongation (Break)	120	%	ASTM D638
Flexural Modulus	330000	psi	ASTM D790
Flexural Strength	12000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	14	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	270	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	260	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	220 to 250	°F
Drying Time	4.0 to 7.0	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	40 to 75	%
Rear Temperature	520 to 560	°F
Middle Temperature	540 to 580	°F
Front Temperature	550 to 600	°F
Nozzle Temperature	550 to 590	°F
Processing (Melt) Temp	560 to 600	°F
Mold Temperature	160 to 210	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 70	rpm
Vent Depth	1.5E-3 to 3.0E-3	in

