AuroraGuard™ 2012

Aurora Material Solutions, LLC - *Polycarbonate*

General Information

Product Description			
High Flow PC Formerly known as EnPure 2012			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• High Flow		
Uses	• Automotive Applications	• Business Equipment	• Thin-walled Parts
Appearance	• Black	• Colors Available	• Natural Color
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)	20	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)	8500	psi	ASTM D638
Tensile Elongation (Break)	120	%	ASTM D638
Flexural Modulus	330000	psi	ASTM D790
Flexural Strength	11500	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F)	12	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