

AuroraGuard™ PC-1012

Aurora Material Solutions, LLC - Polycarbonate

General Information

Product Description

General Purpose PC with up to 100% sustainable feedstock

Formerly known as Evolve PC-1012

General

Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific Europe Latin America North America
Features	<ul style="list-style-type: none"> General Purpose Renewable Resource Content
Uses	<ul style="list-style-type: none"> Automotive Applications Business Equipment General Purpose Thin-walled Parts
Appearance	<ul style="list-style-type: none"> Black
Processing Method	<ul style="list-style-type: none"> 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)	10	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)	8000	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			ASTM D256
32°F	10	ft·lb/in	
73°F	12	ft·lb/in	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	275	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	265	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	190	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.020	%
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 4.0 hr

