

AuroraGuard™ 1012IM

Aurora Material Solutions, LLC - Polycarbonate + ABS

General Information
Product Description

High Impact PC/ABS

Formerly known as EnValoy 1012IM

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• High Impact Resistance		
Uses	• Automotive Applications	• Business Equipment	
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding	• Profile Extrusion	

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.14		ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.126 in)	7.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	7900	psi	ASTM D638
Tensile Strength (Break)	7830	psi	ASTM D638
Tensile Elongation (Break)	150	%	ASTM D638
Flexural Modulus	336000	psi	ASTM D790
Flexural Strength	13000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°F	9.0	ft·lb/in	
73°F	12	ft·lb/in	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	255	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	225	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.13 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180 to 220	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	450 to 500	°F
Middle Temperature	455 to 505	°F
Front Temperature	465 to 525	°F
Nozzle Temperature	475 to 525	°F
Processing (Melt) Temp	475 to 525	°F
Mold Temperature	175 to 200	°F
Back Pressure	25.0 to 100	psi
Screw Speed	25 to 75	rpm

Injection Notes

Maximum Drying Time 4.0 hrs

