

## AuroraGuard™ PBDM003

Aurora Material Solutions, LLC - Polybutylene Terephthalate

### General Information

#### Product Description

High Flow Direct Metalizing Crystalline Resin

Formerly known as EnCounter PBDM003

#### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• Crystalline	• High Flow	• Metallizable
Uses	• Coating Applications		
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding		

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.30		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	28	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.126 in)	0.016 to 0.020	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	8700	psi	ASTM D638
Tensile Elongation (Break)	50	%	ASTM D638
Flexural Modulus	392000	psi	ASTM D790
Flexural Strength	13000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	3.0	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	383	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	275	°F	ASTM D648

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	410 to 440	°F
Middle Temperature	430 to 470	°F
Front Temperature	450 to 500	°F
Nozzle Temperature	460 to 500	°F
Processing (Melt) Temp	470 to 500	°F
Mold Temperature	120 to 170	°F
Back Pressure	145 to 290	psi
Screw Speed	30 to 80	rpm

#### Injection Notes

Maximum Drying Time 8 hrs

