

## AuroraGuard™ 15615

Aurora Material Solutions, LLC - Polybutylene Terephthalate

### General Information

#### Product Description

Low temperature impact PBT

Formerly known as EnCounter 15615

#### General

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

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

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.21		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	14	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.126 in)	2.5E-5 to 3.8E-4	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	5800	psi	ASTM D638
Tensile Elongation (Break)	7.0	%	ASTM D638
Flexural Modulus	260000	psi	ASTM D790
Flexural Strength	8270	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-8°F	16	ft·lb/in	
73°F	17	ft·lb/in	
Unnotched Izod Impact			ASTM D4812
-8°F	65	ft·lb/in	
73°F	65	ft·lb/in	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	210	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	120	°F	ASTM D648

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	12	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	40 to 80	%
Rear Temperature	450 to 480	°F
Middle Temperature	460 to 490	°F
Front Temperature	470 to 500	°F
Nozzle Temperature	460 to 490	°F
Processing (Melt) Temp	470 to 500	°F
Mold Temperature	120 to 170	°F
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 100	rpm
Vent Depth	5.0E-4 to 1.0E-3	in

