

AuroraGuard™ PBT-71889

Aurora Material Solutions, LLC - Polybutylene Terephthalate

General Information

Product Description

AuroraGuard™ PBT-71889 is a Low Viscosity, Black Polybutylene Terephthalate (PBT) Injection Molding Grade.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • Latin America • North America
Features	• Abrasion Resistant • Electrically Insulating • Fuel Resistant • Good Moldability • Low Viscosity • Oil Resistant • Solvent Resistant
Uses	• Automotive Electronics • Electrical/Electronic Applications • Industrial Tanks • Pump Parts
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.31		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	55	g/10 min	ASTM D1238
Molding Shrinkage - Flow	1.8E-3 to 2.0E-3	in/in	ASTM D955
Mechanical			
Tensile Strength (Break)	7500	psi	ASTM D638
Flexural Modulus	339000	psi	ASTM D790
Flexural Strength	11900	psi	ASTM D790
Impact			
Notched Izod Impact (73°F)	0.80	ft·lb/in	ASTM D256
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	305	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	125	°F	ASTM D648
Flammability			
Flame Rating (0.12 in)	HB		Internal Method

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	185	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	445 to 490	°F
Middle Temperature	445 to 490	°F
Front Temperature	445 to 490	°F
Nozzle Temperature	470 to 490	°F
Mold Temperature	150 to 190	°F
Injection Rate	Moderate-Fast	
Back Pressure	0.00 to 50.0	psi
Screw Speed	60 to 120	rpm

