

**ColorFast® PBT-1000R**
*Americhem - Polybutylene Terephthalate*
**General Information**
**Product Description**

General purpose injection molding grade unfilled PBT with mold release.

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Mold Release		
Features	• Excellent Colorability	• Good Mold Release	
Uses	• Automotive Applications • Battery Cases • Connectors	• Consumer Applications • Engineering Parts • Household Goods	• Housings • Industrial Applications • Industrial Parts
Forms	• Pellets		
Processing Method	• Injection Molding		

**Properties <sup>1</sup>**

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.31		ASTM D792
Melt Mass-Flow Rate (MFR) (235°C/2.16 kg)	23	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	0.015 to 0.023	in/in	ASTM D955
<b>Mechanical</b>			
Tensile Strength <sup>2</sup> (Yield)	7500	psi	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	200	%	ASTM D638
Flexural Modulus <sup>2</sup>	340000	psi	ASTM D790
Flexural Strength <sup>2</sup>	12000	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (73°F)	1.0	ft·lb/in	ASTM D256
<b>Hardness</b>			
Rockwell Hardness (R-Scale)	117		ASTM D785
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed, 0.250 in)	130	°F	ASTM D648

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	12	hr
Suggested Shot Size	40 to 60	%
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	40 to 70	rpm
Vent Depth	5.0E-4 to 1.0E-3	in

