

**ColorFast® FRPBT210**

Americhem - Polybutylene Terephthalate

## General Information

**Product Description**

V-0 rated, impact modified unfilled PBT

**General**

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

 Properties <sup>1</sup>

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.34		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	8.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	0.010 to 0.014	in/in	ASTM D955
<b>Mechanical</b>			
Tensile Strength <sup>2</sup> (Yield)	7000	psi	ASTM D638
Tensile Strength <sup>2</sup> (Break)	6100	psi	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	60	%	ASTM D638
Flexural Modulus <sup>2</sup>	300000	psi	ASTM D790
Flexural Strength <sup>2</sup>	12000	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (73°F)	7.0	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)	210	°F	ASTM D648
<b>Flammability</b>			
Flame Rating	V-0		UL 94

## 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
<b>Notes</b>	
<sup>1</sup> Typical properties: these are not to be construed as specifications.	
<sup>2</sup> 2.0 in/min	

