

**ColorRx® PBT-3000RX**
*Americhem - Polybutylene Terephthalate*
**General Information**
**Product Description**

PBT-3000RX is a medium flow Polybutylene Terephthalate (PBT) with excellent heat and chemical resistance. It is suitable for healthcare applications.

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Biocompatible • E-beam Sterilizable	• Ethylene Oxide Sterilizable • Excellent Colorability	• Radiation Sterilizable • Steam Sterilizable
Uses	• Connectors • Engineering Parts	• Housings • Medical/Healthcare Applications	• Surgical Instruments
Agency Ratings	• ISO 10993		
Forms	• Pellets		
Processing Method	• Injection Molding		

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

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density / Specific Gravity	1.31		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	20	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.012 to 0.018	in/in	ASTM D955
Water Absorption (24 hr)	0.060	%	ASTM D570
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength (Yield)	8120	psi	ASTM D638
Tensile Elongation (Break)	> 120	%	ASTM D638
Flexural Modulus	326000	psi	ASTM D790
Flexural Strength	10500	psi	ASTM D790
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact	0.83	ft·lb/in	ASTM D256
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (264 psi, Unannealed, 0.126 in)	140	°F	ASTM D648

**Processing Information**

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
Drying Temperature	250 to 280	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	450 to 480	°F
Middle Temperature	450 to 480	°F
Front Temperature	450 to 480	°F
Processing (Melt) Temp	460 to 500	°F
Mold Temperature	150 to 200	°F

