

**ColorRx® PA-2000RX**

Americhem - Polycarbonate + ABS

**General Information**
**Product Description**

PA-2000RX is a medium flow injection molding grade of polycarbonate and acrylonitrile butadiene styrene (PC+ABS) alloy with high impact resistance. It consists of a non-halogenated FR system with UL flame rating of V-0 at 1.5 mm. 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
Uses	• Closures • Engineering Parts	• Housings • Industrial Parts	• Medical/Healthcare Applications • Surgical Instruments
UL File Number	• E178307		
Forms	• Pellets		
Processing Method	• Injection Molding		

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

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.17		ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/2.16 kg)	19	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	4.0E-3 to 6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>2</sup> (Yield)	9000	psi	ASTM D638
Tensile Strength <sup>2</sup> (Break)	7500	psi	ASTM D638
Tensile Elongation <sup>2</sup> (Yield)	4.0	%	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	80	%	ASTM D638
Flexural Modulus <sup>2</sup>	380000	psi	ASTM D790
Flexural Strength <sup>2</sup>	14000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	11	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	122		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	195	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	V-0		
0.10 in	5VA		

**Processing Information**

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	8.0	hr
Suggested Shot Size	30 to 60	%
Rear Temperature	410 to 490	°F



Middle Temperature	420 to 500 °F
Front Temperature	440 to 525 °F
Nozzle Temperature	450 to 525 °F
Processing (Melt) Temp	450 to 525 °F
Mold Temperature	140 to 180 °F
Back Pressure	50.0 to 100 psi
Screw Speed	30 to 75 rpm
Vent Depth	1.5E-3 to 3.0E-3 in

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 2.0 in/min

