

ColorRx® PP1-1000RX
Americhem - Polypropylene Homopolymer
General Information
Product Description

PP1-1000RX is a medium flow grade injection molding grade of polypropylene (PP) homopolymer with good chemical resistance and processability. It is suitable for healthcare applications sterilizable by EtO, steam, and gamma radiation up to 25 kGy.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• Autoclave Sterilizable	• Ethylene Oxide Sterilizable	• Steam Sterilizable
	• Biocompatible	• Excellent Colorability	
Uses	• Closures	• Medical/Healthcare Applications	
	• Housings	• Surgical Instruments	
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.907		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.010 to 0.020	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	4300	psi	ASTM D638
Tensile Elongation ² (Yield)	13	%	ASTM D638
Flexural Modulus ²	181000	psi	ASTM D790
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	194	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	120	°F
Drying Time	2.0 to 4.0	hr
Drying Time, Maximum	6.0	hr
Suggested Shot Size	40 to 60	%
Rear Temperature	400 to 470	°F
Middle Temperature	410 to 480	°F
Front Temperature	420 to 490	°F
Nozzle Temperature	430 to 510	°F
Processing (Melt) Temp	420 to 500	°F
Mold Temperature	80 to 100	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 in/min

