

ColorRx® PET-1000RX

Americhem - Copolyester

General Information

Product Description

PET-1000RX is an injection molding grade of amorphous copolyester with high clarity and good melt strength. It is suitable for healthcare applications and sterilizable by EtO and gamma radiation.

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	• Closures • Connectors	• Engineering Parts • Housings	• Medical/Healthcare Applications • Surgical Instruments
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.18		ASTM D792
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.30	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	225000	psi	ASTM D638
Tensile Strength	6200	psi	ASTM D638
Tensile Elongation (Yield)	5.0 to 7.0	%	ASTM D638
Flexural Modulus	225000	psi	ASTM D790
Flexural Strength	9000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	18	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	185	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	190	°F
Drying Time	4.0 to 6.0	hr
Processing (Melt) Temp	500 to 540	°F
Mold Temperature	100 to 150	°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.

