

ColorRx® PC-4500GSRX

Americhem - Polycarbonate

General Information
Product Description

PC-4500GSRX is a low viscosity injection molding grade of gamma stabilized polycarbonate with UV and high heat resistance. It is suitable for healthcare applications and sterilizable by EtO, steam at 121°C, and gamma radiation. Demonstrates reduced color shift after multiple gamma radiation cycles as compared to non-stabilized PC.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Autoclave Sterilizable • Biocompatible • E-beam Sterilizable • Ethylene Oxide Sterilizable	• Excellent Colorability • Food Contact Acceptable • Heat Sterilizable • Radiation (Gamma) Resistant	• Radiation Sterilizable • Steam Sterilizable
Uses	• Closures • Engineering Parts	• Housings • Industrial Parts	• Medical/Healthcare Applications • Surgical Instruments
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	45	g/10 min	ASTM D1238
Water Absorption (24 hr)	0.20	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	8000	psi	ASTM D638
Tensile Strength ² (Break)	7500	psi	ASTM D638
Tensile Elongation ² (Yield)	5.0	%	ASTM D638
Tensile Elongation ² (Break)	50	%	ASTM D638
Flexural Modulus ²	320000	psi	ASTM D790
Flexural Strength ² (Yield)	13000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	3.0	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.252 in)	240	°F	ASTM D648

Notes

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

² 2.0 in/min

