

ColorRx® PCABS-3000GSRX

Americhem - Polycarbonate + ABS

General Information
Product Description

PCABS-3000GSRX is a high flow injection molding grade of gamma stabilized polycarbonate and acrylonitrile butadiene styrene (PC+ABS) alloy with improved 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 • Food Contact Acceptable • Radiation (Gamma) Resistant	• Radiation Sterilizable
Uses	• Closures • Engineering Parts	• Housings • Industrial Parts	• Medical/Healthcare Applications • Surgical Instruments
Agency Ratings	• ISO 10993		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.15		ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	30	g/10 min	ASTM D1238
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3	in/in	ASTM D955
Water Absorption (24 hr, 73°F)	0.10	%	ASTM D570
Mechanical			
Tensile Strength (Yield)	7900	psi	ASTM D638
Tensile Strength (Break)	7000	psi	ASTM D638
Tensile Elongation (Yield)	5.0	%	ASTM D638
Tensile Elongation (Break)	80	%	ASTM D638
Flexural Modulus	330000	psi	ASTM D790
Flexural Strength (Yield)	12000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	8.0	ft·lb/in	ASTM D256
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed, 0.126 in)	215	°F	ASTM D648

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	180	°F
Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	450 to 525	°F
Mold Temperature	140 to 180	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

