

ColorRx® PEEK-3000RX

Americhem - Polyetheretherketone

General Information
Product Description

PEEK-3000RX is a high flow injection molding grade of polyetheretherketone (PEEK) with excellent chemical resistance and radiation resistance. It is suitable for healthcare applications.

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 • Heat Sterilizable	• Radiation Sterilizable • Steam Sterilizable
Uses	• Aerospace Applications • Connectors • Engineering Parts	• Industrial Parts • Medical/Healthcare Applications • Metal Replacement	• Surgical Instruments
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.30		ASTM D792
Melt Mass-Flow Rate (MFR) (400°C/2.16 kg)	36	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	0.014 to 0.016	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	14400	psi	ASTM D638
Tensile Elongation ² (Yield)	5.2	%	ASTM D638
Tensile Elongation ² (Break)	10 to 20	%	ASTM D638
Flexural Modulus ²	550000	psi	ASTM D790
Flexural Strength ²	22000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	0.95	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	102		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Annealed)	320	°F	ASTM D648

Notes

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

² 2.0 in/min

