

ColorFast® PAEK-1000MD

Americhem - Polyaryletherketone

General Information
Product Description

PAEK-1000MD is a high flow injection molding grade of polyaryletherketone (PAEK) 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	• Connectors • Engineering 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	1.29		ASTM D792
Melt Mass-Flow Rate (MFR) (400°C/2.16 kg)	25	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	7.0E-3 to 0.012	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	12800	psi	ASTM D638
Tensile Elongation ² (Yield)	6.0	%	ASTM D638
Tensile Elongation ² (Break)	> 40	%	ASTM D638
Flexural Modulus ²	450000	psi	ASTM D790
Flexural Strength ²	17000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.3	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Annealed)	375	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	300	°F
Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	690 to 735	°F
Mold Temperature	300 to 350	°F

Notes

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

² 2.0 in/min

