ColorRx® FRPCT80RX

Americhem - *Polycarbonate + PBT*

General Information

Product Description

FRPCT80RX is a high flow injection molding grade of PC+PBT alloy with improved impact and chemical resistance. It consists of a Brominated FR system with a flame rating of V-0/1.5mm. 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	• Radiation Sterilizable • Steam Sterilizable
Uses	• Closures • Connectors • Engineering Parts	• Housings • Industrial Parts • Medical/Healthcare Applications	• Surgical Instruments
Agency Ratings	• ISO 10993-5		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density / Specific Gravity	1.34		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	30	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.010 to 0.012	in/in	ASTM D955
Water Absorption (24 hr)	0.080	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [2] (Yield)	7000	psi	ASTM D638
Tensile Strength [2] (Break)	6100	psi	ASTM D638
Tensile Elongation (Yield)	5.0	%	ASTM D638
Tensile Elongation [2] (Break)	54	%	ASTM D638
Flexural Modulus [2]	415000	psi	ASTM D790
Flexural Strength [2]	15000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F)	14	ft·lb/in	ASTM D256
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	108		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	190	°F	ASTM D648
Electrical	**Nominal Value**	**Unit**	**Test Method**
Dielectric Strength (0.125 in, air)	470	V/mil	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating [3] (0.06 in)	V-0		UL 94

Processing Information

Injection	**Nominal Value**	**Unit**
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Suggested Shot Size	40 to 60	%
Rear Temperature	460 to 490	°F
Middle Temperature	470 to 500	°F

Front Temperature	480 to 510	°F
Nozzle Temperature	470 to 500	°F
Processing (Melt) Temp	470 to 500	°F
Mold Temperature	100 to 190	°F
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 150	rpm
Vent Depth	1.0E-3 to 3.0E-3	in

Notes

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

[2] 2.0 in/min

[3] Submitted to UL for approval.