

ColorRx® PPSU-1000RX

Americhem - Polyphenylsulfone

General Information
Product Description

PPSU-1000RX is a high flow injection molding grade of polyphenylsulfone (PPSU) with high heat resistance and toughness. It is suitable for healthcare applications and sterilizable by EtO and steam.

General

Material Status	<ul style="list-style-type: none"> Commercial: Active 		
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America
Features	<ul style="list-style-type: none"> Autoclave Sterilizable Biocompatible E-beam Sterilizable 	<ul style="list-style-type: none"> Ethylene Oxide Sterilizable Excellent Colorability Heat Sterilizable 	<ul style="list-style-type: none"> Radiation Sterilizable Steam Sterilizable
Uses	<ul style="list-style-type: none"> Engineering Parts Medical/Healthcare Applications 	<ul style="list-style-type: none"> Metal Replacement Surgical Instruments 	
Forms	<ul style="list-style-type: none"> Pellets 		
Processing Method	<ul style="list-style-type: none"> Injection Molding 		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.30		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	17	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	7.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.37	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	10000	psi	ASTM D638
Tensile Elongation ² (Yield)	7.2	%	ASTM D638
Tensile Elongation ² (Break)	60	%	ASTM D638
Flexural Modulus ²	350000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	13	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	405	°F	ASTM D648

Notes

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

² 2.0 in/min

