

ColorRx® PPSU-H200

Americhem - Polyphenylsulfone

General Information
Product Description

PPSU-H200 is a standard 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 Europe Latin America North America
Features	<ul style="list-style-type: none"> Autoclave Sterilizable Biocompatible E-beam Sterilizable Ethylene Oxide Sterilizable Excellent Colorability Heat Sterilizable Radiation Sterilizable Steam Sterilizable
Uses	<ul style="list-style-type: none"> Engineering Parts Medical/Healthcare Applications 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	1.29		ASTM D792
Melt Mass-Flow Rate (MFR) (365°C/5.0 kg)	27	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	0.010	in/in	ASTM D955
Water Absorption (24 hr)	0.33	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	10900	psi	ASTM D638
Tensile Elongation ² (Yield)	7.2	%	ASTM D638
Tensile Elongation ² (Break)	70 to 120	%	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)	380	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	340 to 360	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.050	%
Processing (Melt) Temp	630 to 680	°F
Mold Temperature	270 to 330	°F
Back Pressure	50.0 to 100	psi
Screw Speed	35 to 75	rpm

Notes

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

² 2.0 in/min

