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InStruc® PPSUCF10

Product Description InStruc PPSUCF10 is a 10% carbon fiber reinforced PPSU..InStruc PPSUCF10 offers high operating temperatures, good chemical compatibility, excellent hydrolysis resistance, good dimensional stability, and favorable mechanical properties.

Material Status Commercial: Active

Availability Africa & Middle East, Asia Pacific, Europe, Latin America, North America

Filler / Reinforcement Carbon Fiber, 10% Filler by Weight

Features Filled, Good Dimensional Stability, High Stiffness, High Strength

Uses Aerospace Applications, Connectors, Consumer Applications, Electrical/Electronic Applications, Engineering Parts, Housings, Industrial Applications, Industrial Parts, Metal Replacement, Military/Defense Applications, Oil/Gas Applications, Outdoor Applications, Semiconductor Applications

Forms Pellets

Processing Method Injection Molding

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.33	g/cm³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.30 to 0.50	%	ASTM D955

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	4830	MPa	ASTM D638
Tensile Strength	103	MPa	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	5520	MPa	ASTM D790
Flexural Strength (Yield)	152	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	69 to 80	J/m	ASTM D256

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed	216	°C	

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+5 to 1.0E+7	ohms	ASTM D257

Properties provided are only typical values and Americhem assumes no liability for the customer's use of the information provided. The customer assumes all responsibility for testing determining this products suitability in the customer's specific end application.

Revision Date: 9/16/2024

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Polyphenylsulfone

Injection	Nominal Value	Unit
Drying Temperature	149	°C
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	343 to 388	°C
Mold Temperature	138 to 163	°C
Back Pressure	0.345 to 0.689	MPa

Notes

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

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