

**ColorFast® SFT5500**

Americhem - Polyphenylsulfone

**General Information**
**Product Description**

Proprietary polyphenylsulfone compound for Aerospace interior cabin applications. This PFAS-free material meets FAA regulations for 60 second vertical burn resistance, low smoke density & toxicity, and 55/55 OSU heat release. The material offers high flow and balanced mechanical properties to offer ease in thin-wall molding and weight reduction opportunities.

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• Excellent Colorability		
Uses	• Aerospace Applications	• Engineering Parts	• Military/Defense Applications
	• Connectors	• Industrial Applications	• Outdoor Applications
	• Consumer Applications	• Industrial Parts	
Forms	• Pellets		
Processing Method	• Injection Molding		

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.29		ASTM D792
Melt Mass-Flow Rate (MFR) (380°C/2.16 kg)	25	g/10 min	ASTM D1238
Molding Shrinkage - Flow	8.0E-3 to 0.012	in/in	ASTM D955
Molding Shrinkage - Across Flow	8.0E-3 to 0.012	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>2</sup> (Yield)	11000	psi	ASTM D638
Tensile Strength <sup>2</sup> (Break)	8000	psi	ASTM D638
Tensile Elongation <sup>2</sup> (Yield)	7.4	%	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	30 to 50	%	ASTM D638
Flexural Modulus <sup>2</sup>	560000	psi	ASTM D790
Flexural Strength <sup>2</sup>	15500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	2.7	ft-lb/in	ASTM D256

**Processing Information**

Injection	Nominal Value	Unit
Drying Temperature	275 to 325	°F
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	24	hr
Suggested Max Moisture	< 0.010	%
Suggested Shot Size	50 to 75	%
Rear Temperature	625 to 680	°F
Middle Temperature	625 to 680	°F
Front Temperature	625 to 680	°F
Nozzle Temperature	625 to 680	°F
Processing (Melt) Temp	650 to 700	°F
Mold Temperature	275 to 325	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	1.0E-3 to 3.0E-3	in

