

ColorFast® SFT4300

Americhem - Polyetherimide

General Information
Product Description

SFT4300 is a standard flow injection molding grade of polyetherimide (PEI) alloy with excellent strength properties, and high chemical and flame resistance. It is suitable for Aerospace applications meeting FAA flammability requirements for FAR 25.853(d) and OSU heat release = 45/45.

General

Material Status	• Commercial: Active ¹		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Excellent Colorability		
Uses	• Aerospace Applications • Connectors • Consumer Applications	• Engineering Parts • Industrial Applications • Industrial Parts	• Military/Defense Applications • Outdoor Applications
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ²

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.30		ASTM D792
Melt Mass-Flow Rate (MFR) ³	24	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.40	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ⁴ (Yield)	13500	psi	ASTM D638
Tensile Elongation ⁴ (Yield)	7.0	%	ASTM D638
Flexural Modulus	325000	psi	ASTM D790
Flexural Strength ⁴	14500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	2.0	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.252 in)	334	°F	ASTM D648
Glass Transition Temperature	367	°F	ISO 11357-2
Flammability	Nominal Value	Unit	Test Method
OSU Peak Heat Release Rate - 5 minute test (78.7 mil)	< 45.0	kW/m ²	FAR 25.853
OSU Total Heat Release - 2 Minute Test (78.7 mil)	< 45.0	kW·min/m ²	FAR 25.853
Smoke Density	< 200		ASTM E662

Notes

¹ The property values are based on natural product, values may be affected by coloring of the product.

² Typical properties: these are not to be construed as specifications.

³ 340°C / 5.0kg

⁴ 2.0 in/min

