

## Proto3000 PPSF Fused Deposition Modeling Polymer

Category : Polymer , Rapid Prototyping Polymer , Thermoplastic , Polyphenylsulfone (PPSU)

### Material Notes:

Description: PPSF/PPSU (polyphenylsulfone) material has the greatest heat and chemical resistance of all Fortus materials - ideal for aerospace, automotive and medical applications. PPSF parts manufactured on Fortus 3D Production Systems are not only mechanically superior, but also dimensionally accurate, to better predict end-product performance. Users can also sterilize PPSF via steam autoclave, EtO sterilization, plasma sterilization, chemical sterilization and radiation. PPSF gives you the ability to manufacture Real Parts™ direct from digital files that are ideal for conceptual modeling, functional prototyping, manufacturing tools, and end-use-parts. Available Colors: Tan

Information provided by Proto3000 for their prototyping engineering services.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Proto3000-PPSF-Fused-Deposition-Modeling-Polymer.php](http://www.lookpolymers.com/polymer_Proto3000-PPSF-Fused-Deposition-Modeling-Polymer.php)

Physical Properties	Metric	English	Comments
Density	1.28 g/cc	0.0462 lb/in <sup>3</sup>	ASTM D792

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	55.0 MPa	7980 psi	Type 1, 2"/min; ASTM D638
Elongation at Break	3.0 %	3.0 %	ASTM D638
Tensile Modulus	2.068 GPa	299.9 ksi	Type 1, 0.125; ASTM D638
Flexural Strength	110 MPa	16000 psi	Method 1, 0.05"/min; ASTM D790
Flexural Modulus	2.206 GPa	320.0 ksi	ASTM D790
Izod Impact, Notched	0.5873 J/cm	1.100 ft-lb/in	Method A; ASTM D256
Izod Impact, Unnotched	1.655 J/cm	3.100 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	55.0 µm/m-°C	30.6 µin/in-°F	ASTM D696
Deflection Temperature at 1.8 MPa (264 psi)	189 °C	372 °F	ASTM D648
Glass Transition Temp, Tg	230 °C	446 °F	DAM (SSYS)
Flammability, UL94	V-0 @ Thickness 3.20 mm	V-0 @ Thickness 0.126 in	

Electrical Properties	Metric	English	Comments
	3.45	3.45	

Dielectric Constant Electrical Properties	Metric @ Frequency 60.0 Hz	English @ Frequency 60.0 Hz	IEC 60250 Comments
Dielectric Strength	14.6 kV/mm	371 kV/in	IEC 60112

Descriptive Properties	Value	Comments
Environmental Resistance	Antifreeze (Prestone), 50%	Passed, 24 hrs @ 23°C
	Antifreeze (Prestone), 50%	Passed, 24 hrs @ 100°C
	Gasoline-Unleaded	Passed, 24 hrs @ 23°C
	Motor Oil 10W-40	Passed, 24 hrs @ 23°C
	Motor Oil 10W-40	Passed, 24 hrs @ 100°C
	Power Steering Fluid	Passed, 24 hrs @ 23°C
	Power Steering Fluid	Passed, 24 hrs @ 100°C
	Transmission Fluid	Passed, 24 hrs @ 23°C
	Transmission Fluid	Passed, 24 hrs @ 100°C
	Windshield Washer Fluid, 50%	Passed, 24 hrs @ 23°C

## Contact Songhan Plastic Technology Co.,Ltd.

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