SELECT[™]

PPSU

Why should you use Prima SELECT™ PPSU?

- New formula makes it easy to print*
- One of the strongest filament on the market
- Excellent heat resistance
- Very high chemical resistance
- Can be used for a wide range of applications





SELECTTM PPSU

Polyphenylsulfone (PPSU) is an amorphous high performance thermoplastic offering better impact resistance and chemical resistance than PEI. PPSU can operate in temperatures up to 180°C. PPSU has superior hydrolysis resistance when compared to other amorphous thermoplastics as measured by steam autoclaving cycles, it has virtually unlimited steam sterilizability. It also resists common acids and bases over a broad temperature range. Applications are; Aerospace, Aircraft, Automotive, Dental, Medical, Surgical instruments. The PPSU filament is based on the technology of Solvay.

SELECT[™]

PPSU



The PrimaCreator PPSU Filament has unique properties because it does not come into contact with water during the production process and is directly packaged in a vacuum packaging. These properties make the PrimaCreator PPSU Filament particularly suitable for usage in FDM and FFF 3D printers. The material has an excellent adhesion between layers which results in great improvement of the impact resistance, strength, durability and the printing process.

The PPSU Filament produced by PrimaCreator meets the ISO10993 for medical applications and meets the European regulations EC No. 1935/2004, EC No. 2023/2006 and EC No. 10/2011 concerning plastic materials and articles coming into contact with food and is also compliant with the FDA (Food and Drug Administration) for food contact. The colorants used by PrimaCreator to colour the Filament also meet these European regulations.

To make a successful PPSU print there are a few things to keep in mind:

- The printer must have the performance to meet the PPSU filament and it should be printed with a nozzle temperature of 360 400°C.
- The heat bed should be set to 140°C or higher, and a heated chamber is important to have. It's also very important to make sure that the printer is placed in a room where there's hardly any draft and temperature fluctuations.
- PPSU is best printed on a PEI sheet at a printing speed of 15-30 mm/s.

For further information, check the MSDS.

Measurements and Tolerance

Size	Diameter tolerance	Roundness
1,75 mm filament	+/- 0,05 mm	99%
2,85 mm filament	+/- 0,10 mm	99%
Moisture content	< 0,005%	

Physical properties

Description	Value	Test method
Density	1,29 g/cm ³	D 792

Mechanical properties

Description	Value	Test method
Tensile Stress	2340 Mpa	ASTM D638
Flexural Modulus	2410 Mpa	ASTM D790
Impact strenght Notched Izod	690 J/m	ASTM D256
Tensile Impact Strenght	399 KJ/m ²	ASTM D1822

Printer settings

Description	Value
Printer nozzle temperature	360 - 400°C
Heated bed temperature	140°C +

Reseller:

