

PPSU

PPSU (Polyphenylsulfone) shows even better results in impact resistance and chemical resistance than PEI. It can operate in temperatures up to 180°C. This makes it an excellent choice for under-hood automotive applications and medical devices requiring repeated steam sterilization. The hydrolysis resistance is excellent compared to other amorphous thermoplastics. Besides that, it also resists common acids and bases over a broad range of temperatures.

Material features:

- High strength and toughness
- Flame retardant
- Excellent chemical and thermal resistance
- Good hydrolysis resistance
- Heat resistance up to 220°C

Colours:

PPSU is available in 1 colour.

NA1

Packaging:

PPSU is available on our standard transparent reel.*

Ask our team to help you customizing your product.

**Dry +4 hours at max.110°C*



Filament specs.

| Size | Ø tolerance | Roundness |
|--------|-------------|-----------|
| 1,75mm | ± 0,05mm | ≥ 95% |
| 2,85mm | ± 0,10mm | ≥ 95% |

Material properties

| Description | Testmethod | Typical value |
|---|-----------------|------------------------|
| Specific gravity | ASTM D792 | 1.29 g/cm ³ |
| MVR 365°C/5kg | ASTM D1238 | 14-20g/10min |
| Tensile strength at Yield | ISO 527 | 77 MPa |
| Tensile strength at Break | ISO 527 | 77 MPa |
| Elongation-strain at Break | ISO 527 | 60-120% |
| Elongation-strain at Yield | ISO 527 | 7.3% |
| Tensile modulus | ISO 527 | 2410 MPa |
| Flexural strength | ISO 178 | 108 MPa |
| Flexural modulus | ISO 178 | 2380 Mpa |
| Flame retardancy | UL94 | V-0 |
| Impact strength, Izod method 23°C notched | ISO 180 | 56.2 kJ/m ² |
| Heat deflection temp. | ASTM D648 | 207°C |
| Printing temp. | Internal Method | 380±20°C |

Additional info:

Recommended temperature for heated bed is >140°C. Adhesion is possible on different surfaces.

PPSU can be used on desktop FDM or FFF technology 3D printers able to reach the high required temperatures.

Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly.