PPSU

The AON3D PPSU belongs to the polysulfone family. Polyphenylsulfone (PPSU) is an amorphous thermoplastic. It is a technical material with an elevated glass transition temperature and low humidity absorption. It benefits from good chemical and thermal resistance. PPSU can be used in multiple sectors, notably low-volume injection molds, automotive spare parts, chemical treatment, oil and gas. AON3D PPSU has the following properties:

- → High temperature resistance
- → Hydrolysis resistance
- → Flame retardant – eligible to UL94 V0
- → Aerospace FAR 25.853 Standard
- → Food contact under EU 10/2011
- → Complies with the RoHS and REACH standard

2-year AON3D warranty.

Get Process Parameters at DOCS.AON3D.COM

Filament Properties

Properties	Test Methods	Values
Diameter	INS-6712	1.75 ± 0.1 mm
Density	ISO 1183-1	1.3 g/cm^3
Melt Flow Index (MFI)	ISO 1133-1 (@380°C – 5 kg)	17 g/10 min
Glass Transition Temperature (Tg)	ISO 11357-1 DSC (10°C/min - 0-420°C)	224 °C

Printed Specimens Properties

Properties	Test Methods	Values
Maximum Use T°	-	176 °C
Heat Distortion Temperature (HDT) (1,8Mpa)	ASTM D648	207 °C
Volume Resistivity	ASTM D257	9.0*10^{15} Ohms/cm
Tensile Modulus	ISO 527-2/1A/50	1.752 MPa
Tensile Strength	ISO 527-2/1A/50	53.8 MPa
Tensile Strain at Strength	ISO 527-2/1A/50	6.4 %
Tensile Stress Breake	ISO 527-2/1A/50	53.8 MPa

Printed Specimens Properties

Properties	Test Methods	Values
Tensile Strain at Break (type A)	ISO 527-2/5A/50	6.4 %
Flexural Modulus	ISO 178	1.664 MPa
Deformation at Flexural Strain	ISO 178	5%
Flexural Stress at Conventional Deflection (3,5% strain)*	ISO 178	54.1 MPa
Charpy Impact Resistance	ISO 179-1/1eA	20.7 kJ/m^2
Shore Hardness	ISO 868	79.8D

*According to ISO 178, end of the test at 5% deformation even if there is no specimen break.
*The data should be considered as indicative values - Properties can be influenced by production conditions.

Questions? Contact Us. help@aon3d.com (833) 772-6633