

### PPSU Technical Data Sheet (TDS)

General Properties		Standard
Printed Part Density	1209 Kg/m <sup>3</sup> / 75.4 IB/ft <sup>3</sup>	ISO 1183-1

Thermal Properties		Standard
HDT at 1.8MPa	212 °C / 414 °F	ISO 75-2
HDT at 0.45 MPa	218 °C / 424 °F	ISO 75-2
Vicat softening point at 50 N	220 °C / 428 °F	ISO 306
Glass Transition Temperature	220 °C / 428 °F	ISO 11357-2
Melt Volume Rate	39 cm <sup>3</sup> /10 min / 2.38 in <sup>3</sup> /10 min	ISO 1133
Coefficient of Thermal Expansion	55 E-6/K	ISO 11359-2
Flammability 12 s. vertical	Passed (thickness 1.59 and 6.35 mm)	FAR 25.853 (a)
Flammability 60 s. vertical	Passed (thickness 1.59 and 6.35 mm)	FAR 25.853 (a)

Mechanical Properties  Dried specimen			
Print direction	Standard	XY	ZX
		Flat	Upright
Tensile strength	ISO 527	65.1 MPa / 9.4 ksi	51.6 MPa / 7.5 ksi
Elongation at Break	ISO 527	6.50%	3.20%
Young's Modulus	ISO 527	2037 MPa / 295 ksi	2036 MPa / 295 ksi
Flexural Strength	ISO 178	92.6 MPa / 13.4 ksi	96.5 MPa / 14.0 ksi
Flexural Modulus	ISO 178	2152 MPa / 312 ksi	1999 MPa / 290 ksi
Impact Strength Charpy (notched)	ISO 179-2	13.8 kJ/m <sup>2</sup>	5.5 kJ/m <sup>2</sup>
Impact Strength Charpy	ISO 179-2	200.7 kJ/m <sup>2</sup>	22.6 kJ/m <sup>2</sup>
Impact Strength Izod (notched)	ISO 180	12.0 kJ/m <sup>2</sup>	5.5 kJ/m <sup>2</sup>
Impact Strength Izod (unnotched)	ISO 180	119 kJ/m <sup>2</sup>	14.3 kJ/m <sup>2</sup>