

Polypropylene Pellets

SKU: GR105PP

Xtellar polypropylene (PP) pellets is an engineered grade resin for 3D printing which provides an excellent balance of mechanical properties, dimensional stability, and chemical resistance for use in pellet-based 3D printers. This custom engineered PP grade provides a balance of strength and impact resistance while enabling the production of relatively high strength, watertight, lightweight, and chemically resistant parts.

Recommended Print Settings

Parameter	Units	Range
Extruder Temperature		
Nozzle	°C	210 – 220
Zone 3	°C	210 – 220
Zone 2	°C	170 – 180
Zone 1	°C	155 – 165
Bed Temperature	°C	20 – 40
Bed Substrate	–	Polypropylene Sheet (0.5 inch thick)
Printing Speed (First Layer)	mm/min	1,000 – 4,000 (30%)

Printed Part Properties

Parameter	Method	Units	Value
Density	D 792	g/cm ³	0.89
Tensile Strength at Yield	D 638	MPa	16
Tensile Strength at Break	D 638	MPa	13
Tensile Elongation at Yield	D 638	%	5
Tensile Elongation at Break	D 638	%	99
Young's Modulus	D 790	MPa	1245
Deflection Temperature (at 0.455 MPa)	D 648	°C	93
Vicat Softening Temperature (at 10 N)	D 1525	°C	130

Notes

1. Recommended process conditions and printed part properties may be changed at any moment without previous communication from Xtellar.
2. This resin does not contain the substance Bisphenol A (BPA, CAS: 80-05-7) in its composition.
3. For information on about safety, handling, individual protection, first aids and waste disposal, please see MSDS.
4. In case of questions regarding utilization or regulatory information, please contact our technical assistance area.