

GR105PP

GR105PP is an **engineered grade** of polypropylene (PP) pellets for 3D printing which provides an excellent balance of mechanical properties, dimensional stability and chemical resistance for use in pellet based 3D printers.

This 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.

Printed Part Properties

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

Note: Printed part properties obtained from die cut tensile bars from a single walled box print. Tensile specimens were oriented parallel to the layer direction.

Notes

1. Recommended process conditions and printed part properties may be changed at any moment without previous communication from Braskem.
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.

Braskem does not guarantee printed part conditions, these represent estimated values based on internal test methods. Properties may vary based on print conditions.