

# GR500PP-GF

GR500PP-GF is an **engineering-grade** composite made with glass fiber (GF) and is designed to provide robust impact strength performance while maintaining a high degree of printability for complex structures.

GR500PP-GF provides engineering level performance without compromising any of PP's inherent properties which include light weight, water resistance (no drying needed), chemical resistance, and impact resistance.

## Printed Part Properties

Parameter	Method	Units	Value
Density	D 792	g/cm <sup>3</sup>	1.06
Hardness	D 2240	Shore D	63
Ultimate Tensile Strength*	D 638	MPa	46
Tensile Elongation at Break*	D 638	%	2.2
Young's Modulus *	D 638	GPa	5.2
Flexural Modulus – Chord Modulus *	D 790	GPa	4.1
Izod Impact Strength at 23°C *	D 256	J/m	189
Deflection Temperature at 0.455 MPa, 12.7mm	D 648	°C	154
Vicat Softening Temperature at 10 N	D 1525	°C	157

\* Printed part properties obtained using test specimens printed in X-Y direction under the following conditions: printing temperature 240°C, bed temperature 85°C, print speed 1800 mm/min, 100% of grid (90°) infill, 0 perimeter/shell layers, 0.60 mm hardened nozzle and 0.2 mm layer height.

## 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.**