

# PP

PP is our easy to print general purpose low density Polypropylene. PP has been developed for optical clarity while maintaining mechanical performance and a superb layer adhesion. PP's high stretch ability, decent flexibility and chemical/fatigue resistance makes it suitable for a variety of household articles and containers. PP can also be used for engineering articles such as living-hinges and snap-fit fastener materials. Lastly PP can be used to print dishwasher & microwave safe objects. PP is a cost-effective all round filament suitable for a broad variety of needs.

## Material features:

- High chemical & Fatigue resistance
- High elongation before break
- Superb layer adhesion
- Suitable for food contact articles
- Dishwasher & Microwave safe



## Filament specs.

Size	Ø tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%
2,85mm	± 0,10mm	≥ 95%

## Material properties

Description	Testmethod	Typical value
Specific gravity	ASTM D1505	0,9 g/cc
MFI 230°C / 2,16kg	ISO 1133	8 g/10 min
Tensile strength	ASTM D638	12 Mpa
Elongation at break	ASTM D638	>600%
Flexural modulus	ASTM D790	402 Mpa
Hardness	ASTM D2240	D50
Printing temp.		230±10°C
Melting temp.		205±15°C
Vicat Softening Temperature		103°C

## Additional info:

PP does not adhere to any print sticker well enough to counteract warp on large objects, therefore we recommend a Polypropylene sheet (inexpensive) so that no heated bed is required. Adherence improves when the first layer temperature is higher. Printing with a raft improves bottom layer removability and evens out unconformities in the PP sheet. PP can be used on most common desktop FDM or FFF technology 3D printers. Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly.