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

**Colours:**

PP is available from stock in 3 colours:

| cl1 | bk1 | wh1 |
|---|---|---|

**Packaging:**

PP is available in nearly any type of packaging and labelling.
Ask our team to help you customizing your product.

| 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 at yield | ASTM D638 | 12 MPa |
| Elongation strain at break | ASTM D638 | 600% |
| Flexural modulus | ASTM D790 | 402 MPa |
| Shore hardness | ASTM D2240 | 50D |
| Printing temp. | Internal method | 235±10°C |
| Melting temp. | - | 205±15°C |
| Vicat softening temp. | - | 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) If you have a heated bed the recommended temperature is ≤85°C 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.