

# 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

## Colours:

PP is available from stock in 3 colours:



## 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.

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