

Polypropylene (PP)

General

Polypropylene is a semi-crystalline plastic and belongs to the group of polyolefins.

Polypropylene is the second most commonly used plastic worldwide.

The purefil filament is made from a special polypropylene, which has lower crystallinity and therefore achieves greater transparency. This also leads to better processability with less warping.

Polypropylene has the lowest density of all standard plastics. This means that parts with a significantly lower weight can be produced and with a 1kg filament you can produce significantly more parts than with other materials.

PP has very good chemical resistance and is resistant to most acids and alkalis.

Polypropylene has a special long-term bending strength and is therefore very suitable for plastic hinges/film hinges and snaps. Please note the poor cold properties, which make PP brittle at sub-zero temperatures.

This filament meets the composition requirements of the European Regulation No. 10/2011 on plastic materials for food contact.

advantage

- low density
- special long-term bending strength
- good chemical resistance
- Food safe
- Dishwasher safe

disadvantage

- Brittleness at sub-zero temperatures
- Tends to warp (warp effect)
- limited color selection

Processing data

Printing temperature

210-260 °C

Heated bed temperature

70-90 °C

Trocknungstemperatur

Pre-drying not necessary

Trocknungsdauer

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Technical specifications

Shrinkage	-	%
MFR (ISO 1133)	10	g/10min
Yield stress (ISO 527-2)	28	MPa
Elongation at yield (ISO 527-2)	12	%
Elongation at break (ISO 527-2)	12	%
Tensile modulus (ISO 178)	1200	MPa
Heat deflection temperature 0.45 MPa (ISO 75-2/B)	85	°C
Vicat softening temperature A (ISO 306/A)	134	°C
Thermal conductivity 23°C	-	W/(K*m)
Flammability (UL 94)	HB	
Density (ASTM D792)	0.90	g/cm ³

purefil filaments are Made in Switzerland, by



Fabru GmbH
3d printing solutions