

# POLYC

POLYC is a high-performance plastic that possesses a unique balance of toughness, dimensional stability, optical clarity, high heat resistance and excellent electrical resistance. POLYC is commonly used to make all sorts of products including bullet-proof glass, riot shields, cellphone exteriors and many other products that require an engineering grade material. We recommend POLYC for more experienced users that are looking to extend their filament options.

## Material features:

- Great strength & stiffness
- High optical clarity
- Resistant to high temperatures up to 140°C
- Low flammability (UL-94 V2)

Filament specs.		
Size	Ø tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%
Material properties		
Description	Testmethod	Typical value
Specific Gravity	ISO 1183	1,2 g/cc
MFR 300°C/1,2 kg	ISO 1133	22 gr/10 min
Tensile Strength	ISO 527	63 Mpa
Elongation at Break	ISO 527	120%
E- modulus	ISO 527	2350 Mpa
Impact Strength - Charpy Method 23°C, Notched	ISO 179	60 kJ/m <sup>2</sup>
Printing Temp.	DF	280±10°C
Vicat Softening Temp.	ISO 306	145°C
Heat Deflection Temp. (A)	ISO 75	128°C

## Additional info:

Recommend temperature for the 'heated bed' is ± 110°C.

POLYC is printed at a high temperature to make the final product extra strong.

POLYC can be used on all 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.