

PrintaMent PET-G CF20

DATASHEET

Description

PET-G CF20 is a 20% carbon fiber reinforced PET-G based filament. The result is a twice as stiff filament as PET-G with increased impact and heat resistance (HDT) to 80°C. This, together with other features, such as a matt surface, no warp, dimensionally stable and extremely forgiving to print, makes this filament suitable for a very wide variety of applications besides the typically mentioned RC parts, drones, automotive and more.

Features

- 20% Carbon fiber reinforced PET-G
- Extremely stiff
- Increased impact and heat resistance
- No warping and dimensionally stable
- Matt surface
- Abrasive (see additional info)

Colors

Natural Dark Grey

Additional Info

For a heated bed the recommended temperature is $\pm 35-60^\circ\text{C}$. Please consider the use of a hardened steel nozzle when printing with PET-G C20. The carbon fibers are abrasive and will result in fast wear of regular brass nozzles. PET-G C20 can be used on all common desktop FDM or FFF technology 3D printers. Storage: Cool and dry ($15-25^\circ\text{C}$) and away from UV light. This enhances the shelf life significantly.

Technical Data

Dimensions

Size	Tolerance	Roundness
$\varnothing 1,75\text{mm}$	$\pm 0,05\text{mm}$	>95%
$\varnothing 2,85\text{mm}$	$\pm 0,10\text{mm}$	>95%

Physical Properties

Description	Typical Value
Specific gravity	1,19g/cc
E-modulus 1mm/min	3800 MPa
Yield stress 50mm/min	52,5 MPa
Yield strain 50mm/min	4,2%
Strain at break 50mm/min	8,0%
Impact Strength Izod Notched 23 °C	3,8kJ/m ²

Thermal Properties

Size	Roundness
Printing temp.	225-245°C
Heat distortion temp.	80°C