



Technical Document

RS PRO - CARBON-P

Stock numbers:

910-7034 / 910-7043 / 910-7046 / 190-1952 / 190-1953

EN

RS PRO CARBON-P is a 20% carbon fibre reinforced PET-G based filament. This results in a filament that is twice as stiff as PET-G with increased impact and heat resistance (HDT) to 80 °C. Together with other features, such as a matt surface, no warp, dimensionally stable and extremely forgiving to print, makes CARBON-P 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 * at additional info*)

Colours:

RS PRO - CARBON-P is available from stock in its natural dark grey colour

Packaging:

RS PRO - CARBON-P is available in 300, 500 grams and 1 kg packaging.



Filament specs.		
Size	Ø tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%
2,85mm	± 0,10mm	≥ 95%
Material properties		
Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,19 g/cc
MFR 300 °C/1,2 kg	ISO 1133	N.D.
Tensile strength at yield	ISO 527	52.5 Mpa
Tensile modulus	ISO 527	3800MPa
Yield Strain 50mm/min	ISO 527	4,2%
Strain at break 50min/min	ISO 527	8%
Impact strength - Charpy notched 23 °C	ISO 179	3,8 kJ/m ²
Heat distortion temp	ASTM 648	80 °C
Printing temp.	Print lab	235±10 °C

Additional information:

Due to virtually no warping of CARBON-P, this filament can also be printed without a heated bed. If you have a heated bed the recommend temperature is ±35-60 °C.

*** Please consider the use of a hardened steel nozzle when printing with CARBON-P. The carbon fibres are abrasive and will result in fast wear of regular brass nozzles.**

Storage: Cool and dry (15-25 °C). This enhances the shelf life significantly.

- Bed adhesion: Kapton Tape or Glue stick
- Print speed: Medium
- Fan speed: Medium/ high