

# TEHNICAL DATA SHEET

## ABS CF (CARBON FIBER)

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### Product description:

Carbon Fiber ABS is a composite filament that combines ABS polymer with short carbon fibers, enhancing its mechanical properties, such as stiffness, dimensional stability, and strength. This filament offers high impact resistance and heat resistance, along with a lightweight structure due to the carbon fibers. It is ideal for applications that require strong, durable, and lightweight parts

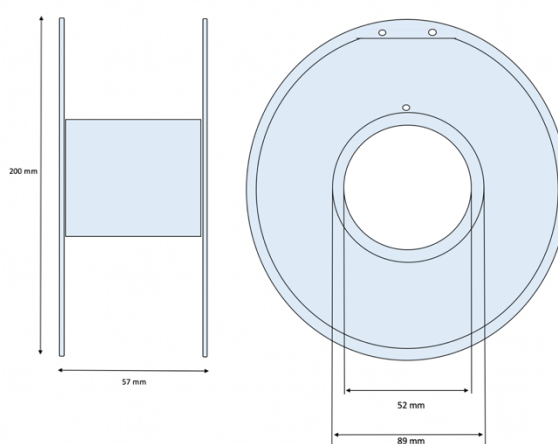
### Storage:

Store in dry area, in a closed container.

### PRODUCT PARAMETERS

Parameter	Value
Filament diameter [mm]	1.75
Diameter tolerance [mm]	+/- 0,005
Oval tolerance [mm]	+/- 0,002

Spool dimensions [mm] (ø / height / hole ø )	200/57/52
Spool weight [g]	204
Spool material	Transparent SAN
Weight with packaging [g]	1 550
Net weight [g]	1 000
Box dimensions [mm]	203/207/70



### RECOMMENDED PRINTING PARAMETERS

Parameter	Value
Print temperature [°C]	250-270
Bed temperature [°C]	90-110
Cooling [%]	Low or off
Closed chamber	Necessary
Chamber temperature [°C]	50-80
Printing Speed [mm/s]	30-50
Nozzle type	Hardened steel or ruby

### PHYSICAL PARAMETERS OF THE MATERIAL

Parameter	Value	Unit	Test method
Density	1,08	g/cc	ISO 1183
Melt flow rate	39	g/10min	ISO 1133 220°C/10Kg
Vicat softening temp.	105	°C	ISO 306 VST/A/50 (50°C/h,10N)
Tensile modulus	4.0-5.0	GPa	ISO 527 1mm/min
Tensile strength	50-70	MPa	ISO 527 @Yield 50mm/min (2inch/min)
Elongation at break	2-5	%	ISO 527 @Break 50 mm/min (2inch/min)
Impact strength	60-80	J/m2	ISO 179 Charpy Notched @23°C (73°F)

The values above have been measured using standard test specimens made of non-colored material at room temperature. The figures should be considered as indicative values only. Actual properties of ABS CF parts can be affected by the printing parameters, design of the model, ambient conditions, application of the printout etc. It is essential that users test our products to determine whether they are suitable for their intended use.