

TECHNICAL DATA SHEET

Prima Creator Select PC-CF

Product code:	Revision Number:	Revision date:	TDS No.:
Select PC-CF	05	11/01/2024	KT037

Characteristic:

High speed printing | high rigidity | high heat resistance | no buckling deformation

IDENTIFICATION OF THE MATERIAL

Trade name	Select PC-CF
Chemical name	Carbon fiber reinforced polyethylene glycol terephthalate
Use	3D Printing
Origin	Prima Creator

GUIDELINE FOR PRINT SETTINGS

Nozzle temperature	270~300°C
Bed temperature	70~100°C
Bed modification	NO
Active cooling fan	OFF
Layer height	0.2mm
Shell thickness	≥1.2mm
Print speed	40~250mm/s

Settings are based on a 0.4mm nozzle.

MATERIAL PROPERTIES

		Test Method
Melt flow rate (MFR)¹	40~50g/10min	ISO 1133
Heat deflection temperature(HDT)²	102°C	ISO 75
density	1.32g/cm ³	ISO 1183
Odor	Odorless	/
Solubility	Insoluble in water	/

1.test conditions: T= 275°C; m= 2.16kg.

2. test conditions:0.45MPa;120°C/h.

MECHANICAL PROPERTIES|TENSILE TEST

Test Method ISO 527

All test specimens were printed using an

Bambu Lab X1C under the

following conditions:

Printing temperature: 290°C

Heated bed temperature: 100°C

Print speed: 100mm/s

Shell thickness: 1.2mm

Infill under 45°



Printed horizontal X,Y-axis

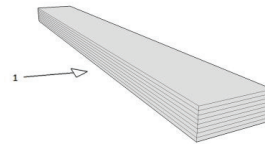
Infill	100%
Tensile strength (Mpa)	65~75
Elongation at break (%)	4~8
E modulus (Mpa)	4000~6000

MECHANICAL PROPERTIES|IMPACT TEST

Test Method ISO 179

The same conditions as tensile test.

1→impact direction



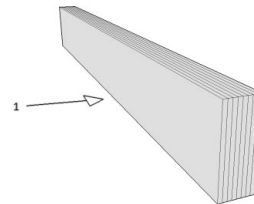
Infill	100%
Impact strength (KJ/m ²)	15~35
Notch impact strength ¹ (KJ/m ²)	3~8

MECHANICAL PROPERTIES |FLEXURAL TEST

Test Method ISO 178

The same conditions as tensile test.

1→bending direction



Infill	100%
Maximum force (Mpa)	120~130
Flexural modulus (Mpa)	4000~5000

1. notch type: type A

FILAMENT SPECIFICATION		Test Method
Diameter 1.75mm	1.75±0.03mm	EX1125
Diameter 2.85mm	2.85±0.03mm	EX1125
Max roundness deviation (1.75)	0.03mm	EX1125
Max roundness deviation (2.85)	0.03mm	EX1125
Net weight on reel	1kg	EX1125