

# ePETG-CF

Technical Data Sheet

Adding carbon fiber reinforced materials to PETG and modifying, it strengthens the rigidity and toughness of PETG.

<b>Material Status</b>	<b>Mass Production</b>		
Characteristics	<ul style="list-style-type: none"> <li>• High strength</li> <li>• Wear resistance</li> <li>• Impact resistance</li> </ul>	<ul style="list-style-type: none"> <li>• Chemical resistance</li> </ul>	
Applications	<ul style="list-style-type: none"> <li>• Aerospace</li> </ul>	<ul style="list-style-type: none"> <li>• Automotive</li> </ul>	<ul style="list-style-type: none"> <li>• Industrial applications</li> </ul>
Form	<ul style="list-style-type: none"> <li>• Filament</li> </ul>		
Processing method	<ul style="list-style-type: none"> <li>• 3D Print, FDM Print</li> </ul>		

	testing method	Typical value	
<b>Physical Properties</b>			
Density	GB/T 1033	1.26	g/cm <sup>3</sup>
Melt Flow Index	GB/T 3682	18.0	(220°C/10KG)
<b>Mechanical Properties</b>			
Tensile Strength	GB/T 1040	24.28	MPa
Elongation at Break	GB/T 1040	4.70	%
Flexural Strength	GB/T 9341	80.34	MPa
Flexural Modulus	GB/T 9341	2951.4	MPa
IZOD Impact Strength	GB/T 1843	1.5	kJ/m <sup>2</sup>
<b>Thermal Properties</b>			
Heat distortion Temperature	GB/T 1634	70.5°C	(0.45Mpa)
Continuous Service Temperature	IEC 60216	N/A	
Maximum (short term) Use Temperature		N/A	
<b>Electrical Properties</b>			
Insulation Resistance	DIN IEC 60167	N/A	
Surface Resistance	DIN IEC 60093	N/A	

Wuhan University Building A403-I,A901,No.6 Yuexing 2 Road,Nanshan District,Shenzhen,Guangdong

China

Tel +86 755 86581960  
 fax +86 755 26031982  
 Email: bright@brightcn.net  
 www.esun3d.com

### Recommended printing parameters

Extruder Temperature	245 - 265°C
Build Platform Temperature	70°C
Fan Speed	40%
Printing Speed	40-300mm/s

Based on Bambu P1S 0.4 mm nozzle and Orcaslicer1.7.0 Beta. Printing conditions may vary with different

### nozzle diameters Drying Recommendations

N/A

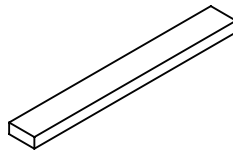
### Precautions:

When slicing, it is best to turn on the Z seam alignment and starting point alignment functions, turn off the Z-axis lift and exit, avoid passing through the shell when idling, optimize the slicing printing path, and appropriately reduce the printing speed to achieve the best printing effect.

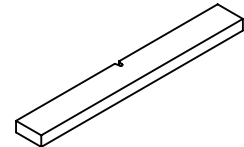
### Mechanical Properties



Tensile testing specimen GB/T 1040



Flexural testing specimen GB/T 9341



Impact testing specimen GB/T 1043

The physical properties, mechanical properties, thermal properties, and electrical properties of the filament are obtained based on the injection molding spline test.

### Print test condition:

Extruder Temperature	255°C
Build Platform Temperature	70°C
Outline/Perimeter Shells	2
Top/Bottom Layers	3
Infill Percentage	100%
Fan speed	40%
Maximum volumetric flow rate	4mm <sup>3</sup> /s

Based on Bambu P1S 0.4 mm nozzle and Orcaslicer2.1.0 Beta.

### Notice

All information supplied by or on behalf of eSUN in relation to this product, whether in the nature of data, recommendations or otherwise, is supported by research and, in good faith, believed reliable, but the product is sold "as is". eSUN assumes no liability and makes no representations or warranties, express or implied, of merchantability, fitness for a particular purpose, or of any other nature with respect to information or the product to which information refers and nothing herein waives any of the seller's conditions of sale.

Wuhan University Building A403-I,A901,No.6 Yuexing 2 Road,Nanshan District,Shenzhen,Guangdong

China

Tel +86 755 86581960

fax +86 755 26031982

Email: bright@brightcn.net

www.esun3d.com