



# TECHNICAL DATA SHEET

## GreenTEC Pro Carbon

### DESCRIPTION

GreenTEC Pro Carbon is a biopolymer made from renewable resources with 10% carbon fiber. The material offers high rigidity, very good mechanical properties and an increased temperature resistance. In addition, the raw material is approved according to the REACH- and RoHS-Standards.

### FEATURES

- High stiffness
- Ideal for light-weight applications
- Heat resistance up to 165°C VICAT A / 115°C HDT/B\*
- Low warping tendency
- UV-resistant like e.g. ASA or PETG
- Biodegradable (DIN EN ISO 14855)

### PROPERTIES <sup>1</sup>

TEST	METHOD	UNIT	VALUE
Tensile modulus (E-Modulus)	ISO 527	MPa	7120
Tensile strength	ISO 527	MPa	65
Elongation at strength	ISO 527	%	3
Stress at break	ISO 527	MPa	58
Nominal elongation at break	ISO 527-2	%	2.5
Notched impact strength	ISO 179/1eA	kJ/m <sup>2</sup>	4.6
Unnotched impact strength	ISO 179/1eU	kJ/m <sup>2</sup>	82
VICAT A (VST)	ISO 306	°C	165*
Melting temperature	ISO 3146-C	°C	180-200
MFR	ISO 1133	g/10min	4
HDT/B	ISO 75	°C	115
Shrinking	ISO 294-4	%	0.2
Density	ISO 1183	g/cm <sup>3</sup>	1.2

\*Temperature resistance tested at a minimum wall thickness of 4 mm.

The use of a hardened steel nozzle with a minimum diameter of 0.5 mm is highly recommended.

### CERTIFICATIONS & ADDITIONAL INFORMATION <sup>2</sup>



### STORAGE AND SHELF LIFE

Store in a dry room at room temperature (18-27°C / 65-80°F). Keep out of direct heat and sunlight. When stored correctly, this material has a shelf life of 2 years.

1. Additional info in our regulatory, additional information and chemical resistance data sheets.  
2. Certifications depend on colors in final product. More info in the additional information sheet.

Metric	Value
TEMPERATURE RESISTANCE	10
EASE OF PRINTING	8
VISUAL QUALITY	10
LAYER ADHESION	8
IMPACT RESISTANCE	8
MAXIMUM STRESS	10
ELONGATION AT BREAK	4

### PRINT SETTINGS

Nozzle	225-250°C
Heatbed	60-70°C
Adhesive	not required
Speed	40-60mm/s
Cooling	20-50%

Recommended settings for printers with a 0.5mm Nozzle. Max. 50% layerheight. Optimal print settings may vary between different printers and also depend on environmental factors.

### NEED HELP?

If you have any question about the product and/or you are experiencing an issue, please contact us via [support@extrudr.com](mailto:support@extrudr.com)