

# PA6 Low Warp GF30

## MATERIAL PROPERTIES

Density	1,34 g/cm <sup>3</sup>	EN ISO 1183
Moisture Absorption (23 °C / 50% r.h.)	2,00%	ISO 62
Water Absorption (23 °C / saturation in water)	6,5%	ISO 62
<b>Mechanical properties*</b>		
Tensile strength (23 °C, 50 mm/min)	80 MPa	EN ISO 527-1
Tensile modulus (23 °C, 50 mm/min)	5500 MPa	EN ISO 527-1
Elongation at break (23 °C, 50 mm/min)	>3 %	EN ISO 527-1
Flexural Modulus (23 °C, 2 mm/min)	4500 MPa	EN ISO 178
Flexural Strength (23 °C, 2 mm/min)	125 MPa	EN ISO 178
Charpy impact strength		
Unnotched @ 23°C	25 kJ/m <sup>2</sup>	ISO 179/1eU
Notched @ 23°C	4 kJ/m <sup>2</sup>	ISO 179/1eU
<b>Thermal properties</b>		
Heat Deflection Temperature		
1.8 MPa	65°C	ISO 75 -1/-2
0.45 MPa	180°C	ISO 75 -1/-2
<b>Tribological properties</b>		
Thermal coefficient of linear expansion		
23-80°C long.	0,7 10 <sup>-4</sup> /K	ISO 11359-1/-2
23-80°C transv.	110-4/K	ISO 11359-1/-2

\*dry

## GUIDELINE FOR PRINT SETTINGS\*

Nozzle temperature	250-280°C
Bed temperature	< 80°C
Active cooling fan	0 - 30%
Layer height**	≥ 0.15mm
Shell thickness**	0.50 - 3.00 mm
Print speed**	30-60 mm/s
Closed chamber	recommended
Dry box	recommended
Ruby or hardened nozzle	recommended
Recommended nozzle	≥ 0.5 mm
Drying (if wet)	recommended***

\* settings are based on a 0,5 mm nozzle.

\*\*\* at least 12h at 80 using a hot dry air oven

\*\* depending on the geometrical complexity

## DESCRIPTION

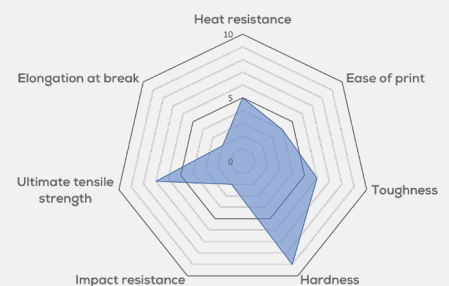
Spectrum PA6 GF30 is another in our range of composite materials based on technical nylon 6 filled with glass fibres. The use of this type of filler is typically applied to increase mechanical refinement in terms of tensile and compressive strength. Spectrum PA6 GF30 is a filament for users who are most concerned with high mechanical performance, high hardness and heat resistance. High glass fibre content provides very low processing shrinkage.

## FEAUTES

- 30% glass fibres
- high mechanical properties and abrasion resistance
- excellent chemical resistance
- printable on desktop devices without a heated chamber
- matt, carbonised print surface
- perfect bonding of the layers

## STORAGE AND SHELF LIFE

Filament should be stored in a dry room at room temperature. Recommended storage temperature is ca. 18-25°C (64.4 -77.0°F). Keep out of moisture, sunlight and direct heat. When stored properly, product has a shelf life of 24 months.



## SUPPORT

If you have any questions or experience any issues, please do not hesitate to contact us at

[support@spectrumfilaments.com](mailto:support@spectrumfilaments.com)

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**Disclaimer**

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