Spectrum FILAMENTS

TECHNICAL DATA SHEET

PCTG

MATERIAL PROPERTIES

Specific Gravity	1.23 g/cm³	ASTM D792
Rockwell Hardness	105 R-scale	ASTM D785
Mechanical Properties		
Tensile Strength at Yield	44 MPa	ISO 527
Tensile Strength at Break	46 Mpa	ISO 527
Elongation at Yield	4.4 %	ISO 527
Elongation at Break	220%	ISO 527
Flexural Strength	60 Mpa	ISO 178
Flexural Modulus	1600 Mpa	ISO 178
Izod Impact Strength Notched @ 23°C	93°C KJ/m²	ISO 180
Thermal Properties		
Heat Distortion Temperature		
@ 0.455MPa	76°C	ISO 75
@ 1.820 Mpa	64°C	ISO 75
VICAT Softening Temperature	88°C	DSC

GUIDELINE FOR PRINT SETTINGS*

Nozzle temperature	250-270°C
Bed temperature	60-100°C
Active cooling fan	YES (up to 100%)
Layer height**	0.05 - 0.30 mm
Shell thickness**	0.40 – 2.70 mm
Print speed**	40-110 mm/s
Closed chamber	not necessary
Dry box	not necessary
Ruby or hardened nozzle	not necessary

* settings are based on a 0,4 mm nozzle.
** depending on the geometrical complexity

DESCRIPTION

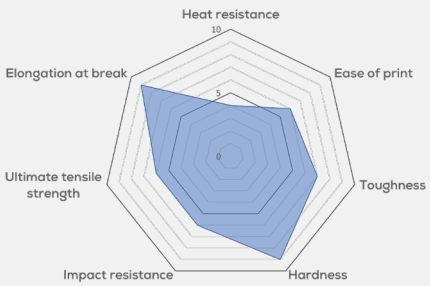
Spectrum Premium PCTG filament is an excellent alternative to PET-G, which is well-known in the 3D printing world. Belonging to the same material family of copolyesters, PCTG filament offers similar ease of printing as PET-G. A very important advantage of the Premium PCTG filament is its increased impact strength, high dimensional stability and low shrinkage. Spectrum Premium PCTG filament combines the most desirable features of Tough PLA and PET-G.

FEAUTURES

- higher impact strength than standard PET-G
- higher transparency than standard PET-G (applies to transparent colours)
- ease of printing, processing and finishing
- chemical resistance
- high dimensional accuracy of the printed elements
- hydrophobic, odourless
- excellent print surface

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**

Disclaimer
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