

# PLA Premium

## MATERIAL PROPERTIES

Specific Gravity	1.24 g/cm <sup>3</sup>	D 792
MFR (210°C, 2.16kg)	6 g/10min	D 1238

## Mechanical Properties

Tensile Strength at Break	53 MPa	D 882
Tensile Yield Strength	60 MPa	D 882
Tensile Modulus	3.5 Gpa	D 882
Tensile Elongation	6,00%	D 882
Notched Izod Impact	16 J/m	D 256
Flexural Strength	83 MPa	D790
Flexural Modulus	3.8 MPa	D790

## Thermal Properties

Heat Distortion Temperature	55°C	E 2092
Glass Transition Temperature	55-60°C	D3418

## GUIDELINE FOR PRINT SETTINGS\*

Nozzle temperature	185-215°C
Bed temperature	0-45°C
Active cooling fan	YES (up to 100%)
Layer height**	0.05 - 0.30 mm
Shell thickness**	0.40 - 2.70 mm
Print speed**	40-150 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

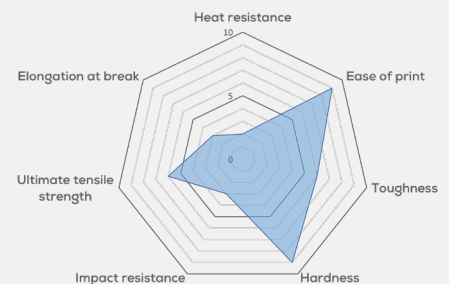
Spectrum PLA Premium is a most popular filament based on polylactide which belongs to aliphatic polymers. It shows full biodegradability. The choice of an appropriate dye base for the pellets for filament extrusion ensures a highly efficient printing with an extremely good adhesion of printed items to the build beds of FDM/FFF 3D printers. Spectrum PLA Premium yields excellent surface quality and detail, producing reliable results.

## FEAURES

- made of biodegradable raw materials
- good mechanical properties (high hardness and tensile resistance)
- user friendly
- high aesthetic surface quality
- good for creating high-resolution parts
- high rigidity of printed items

## 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)