

# **TECHNICAL DATA SHEET**

# **PLA High Speed**

#### **MATERIAL PROPERTIES**

Density	1.24 g/cm <sup>3</sup>	
MFR (210°C, 2.16kg)	70 g/10min	ISO 1133-A
Mechanical properties		
Charpy notched impact strength, 23°C	5 kJ/m²	ISO 179-1eA
Tensile Modulus	3550 MPa	ISO 527 (1)
Tensile Strength	51 MPa	ISO 527 (1)
Elongation at Break	5,00%	ISO 527 (1)
Thermal properties		
Heat deflection temperature (0.45MPa)	60°C	ISO 75-1

# **GUIDELINE FOR PRINT SETTINGS\***

Nozzle temperature - standard speed	190 - 215°C	
Nozzle temperature - high speed	225 - 250°C	
Bed temperature	0 - 60°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 - 600 mm/s	
Closed chamber	not necessary	
Dry box	not necessary	
Ruby or hardened nozzle	not necessary	

<sup>\*</sup> settings are based on a 0,4 mm nozzle.

## Disclaimer

The product- and technical data provided in this datasheet is correct to the best of Spectrum Group Sp. z o.o. knowledge and are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary according to printing conditions, model complexity, environmental conditions, etc. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequence from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications. Spectrum Group Sp. z o.o. shall not be made liable for any damage, injury or loss induced from the use of Spectum Group Sp. z o.o. materials in any particular application.

### DESCRIPTION

Premium PLA High Speed is the latest filament enabling fast 3D printing - thanks to it you can obtain exceptional print quality at a speed of up to 600 mm/s. The new filament is characterized not only by speed, but also by excellent quality, which makes it ideal for a wide range of applications.

### **FEAUTURES**

- high flow rate enabling fast printing up to 600mm/s
- manufactured from fully biodegradable raw materials
- · ease of printing
- good mechanical properties (high hardness and tensile resistance)
- · high aesthetics of the final print surface
- · wide range of colors available

### 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



<sup>\*\*</sup> depending on the geometrical complexity