

# **TECHNICAL DATA SHEET**

# **PLA SILK Rainbow**

#### **MATERIAL PROPERTIES**

Specific Gravity	1.22 g/cm <sup>3</sup>	D 792
MFR (210°C, 2.16kg)	6 g/10min	D 1238
Mechanical Properties		
Tensile Strength at Break	45 MPa	ISO 527
Tensile Strength at Yield	59 MPa	ISO 527
Tensile Modulus	2700 MPa	ISO 527
Elongation at Break	10,00%	ISO 527
Elongation at Yield	5,00%	ISO 527
Notched Izod Impact Strength	6 J/m	D 256
Flexural Strength	72 MPa	D790
Thermal Properties		
Heat Distortion Temperature	50°C	ISO 75
Glass Transition Temperature	57°C	DSC

### **GUIDELINE FOR PRINT SETTINGS\***

Nozzle temperature	210-240°C	
Bed temperature	40-60°C	
Active cooling fan	YES (up to 100%)	
Layer height**	0.05 - 0.30 mm	
Shell thickness**	0.40 - 2.70 mm	
Print speed**	40-110 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 Spectrum Group Sp. z o.o. materials in any particular application.

#### DESCRIPTION

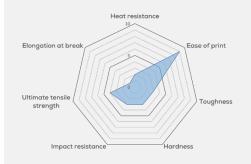
Spectrum PLA SILK Rainbow is a unique type of 3D printing filament based on PLA SILK using coloring concentrates giving the effect of a satin structure. The most distinctive feature of the PLA SILK Rainbow filament is its color transitions. Thanks to the unique production technology, this filament offers smooth color changes during printing process.

# **FEAUTURES**

- · unique aesthetic properties
- regularly varying color along the entire length of the filament
- reduced visibility of layers on the side surfaces of printed items
- satin shine on the entire surface of printed items
- · user friendly

### 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