

# Light Weight PLA

## MATERIAL PROPERTIES

Density	0.52 - 1.24 g/cm <sup>3</sup>		
	@ 210°C; 100% Flow	@ 255°C; 60% Flow	

### Mechanical properties

Charpy impact strength			
unnotched (at 23°C)	-	5.70 kJ/m <sup>2</sup>	ISO 179-1eU
notched (at 23°C)	-	4.32 kJ/m <sup>2</sup>	ISO 179-1eA
Tensile Modulus	3250 MPa	920 MPa	ISO 527
Tensile Strength	47 MPa	-	ISO 527
Tensile strain at break	8%	13.97%	ISO 527

### Thermal properties

Heat Deflection Temperature			
0.45mn/m <sup>2</sup>	59°C	-	
1.81mn/m <sup>2</sup>	53°C	-	

## GUIDELINE FOR PRINT SETTINGS\*

Nozzle temperature	200 - 280°C
Bed temperature	0 - 45°C
Active cooling fan	up to 100%
Layer height**	0.05 - 0.3 mm
Shell thickness**	0.4 - 2.7 mm
Print speed**	30 - 100 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

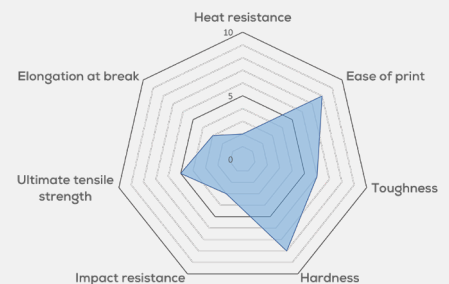
Spectrum Light Weight PLA is a modern filament based on PLA. The uniqueness of this material results from the use of innovative active foaming technology, activated by temperature. The unique properties of this filament allow you to enjoy not only low weight, but also exceptional durability and precision of prints. The matte and rough surface finish provides an attractive appearance for the prints and effectively masks the layers.

## FEAUTURES

- Significant reduction in the weight of printed parts, up to 50%
- Active foaming technology
- Customizable material density
- One spool of Light Weight PLA can yield the same number of prints as two spools of standard PLA due to significantly reduced flow
- Matte finish that highly reduce layers visibility

## 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)