

# rPLA

## MATERIAL PROPERTIES

Specific Gravity	1.24 g/cm <sup>3</sup>	D 792
MFR (210°C, 2.16kg)	5-7 g/10min	-

## Mechanical Properties

Tensile Strength at Break	53.5 MPa	ISO 527
Tensile Strength at Yield	50.2 MPa	ISO 527
Tensile Modulus	3420 MPa	ISO 527
Elongation at Yield	5,50%	ISO 527
Flexural Strength	60.7 MPa	ISO 178
Flexural Modulus	3780 MPa	ISO 178

## Thermal Properties

VICAT Softening Temperature	55°C	ISO 306
Glass Transition Temperature	55-60°C	DSC

## GUIDELINE FOR PRINT SETTINGS\*

Nozzle temperature	190-215°C
Bed temperature	40-50°C
Active cooling fan	YES (up to 100%)
Layer height**	0.05 - 0.30 mm
Shell thickness**	0.40 - 2.70 mm
Print speed**	30-90 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

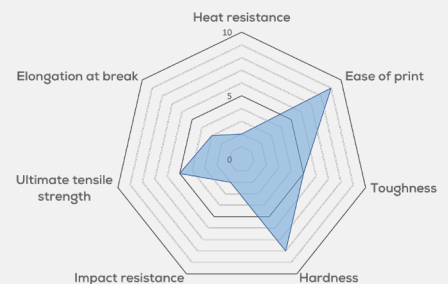
Spectrum r-PLA is an environmentally-friendly 3D printing material that fits into a sustainability initiative. The filament is created by reusing the recycled extrusion residual waste stream. The raw material is collected, shredded, re-mixed and homogenised into a high-grade and easy-to-print recycled PLA filament with much less environmental impact. Spectrum r-PLA retains the properties of classic PLA.

## FEAUTURES

- manufactured from recycled materials
- lower environmental impact by reusing waste
- environmentally-friendly, cardboard spool
- easy printing, similar to normal PLA
- no shrinkage after cooling

## 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)