

rPLA

MATERIAL PROPERTIES

Specific Gravity	1.24 g/cm ³	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

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

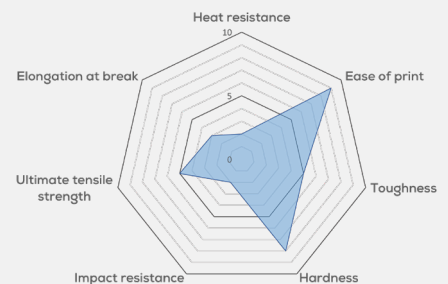
Spectrum r-PLA is an environmentally-friendly 3D printing material that fits into a sustainability initiative. The filament is created by reusing the recycled extrusion residual waste stream. The raw material is collected, shredded, re-mixed and homogenised into a high-grade and easy-to-print recycled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